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Need More Data Center Space?

IT Managers Are Faced With Options Ranging From Simple Housekeeping To Major Construction

by Kurt Marko

• • •

Most data center managers are engaged in a continual juggling act trying to balance requests for new applications and servers against limitations on valuable data center real estate. Continuing improvements in server performance, coupled with technologies such as virtualization and SAN arrays, undoubtedly help shoehorn more applications within a rack's worth of floor space. However, eventually the day comes when a big new project exposes the harsh reality that there's just no room at the inn. While this is a good problem to have, adding data center space is a significant undertaking requiring complex, specialized, and detailed planning, along with a hefty financial commitment.

Info-Tech analyst Darin Stahl finds that computer room space shortages and associated remediation planning are high on the "top 10" list of client concerns. He sees an increasing number of Info-Tech's clients planning data center expansions, typically in the 3,000- to 5,000-square-foot range. Yet running to a general contractor shouldn't be a data center manager's first reaction to space shortages; other options can be far more cost-effective.

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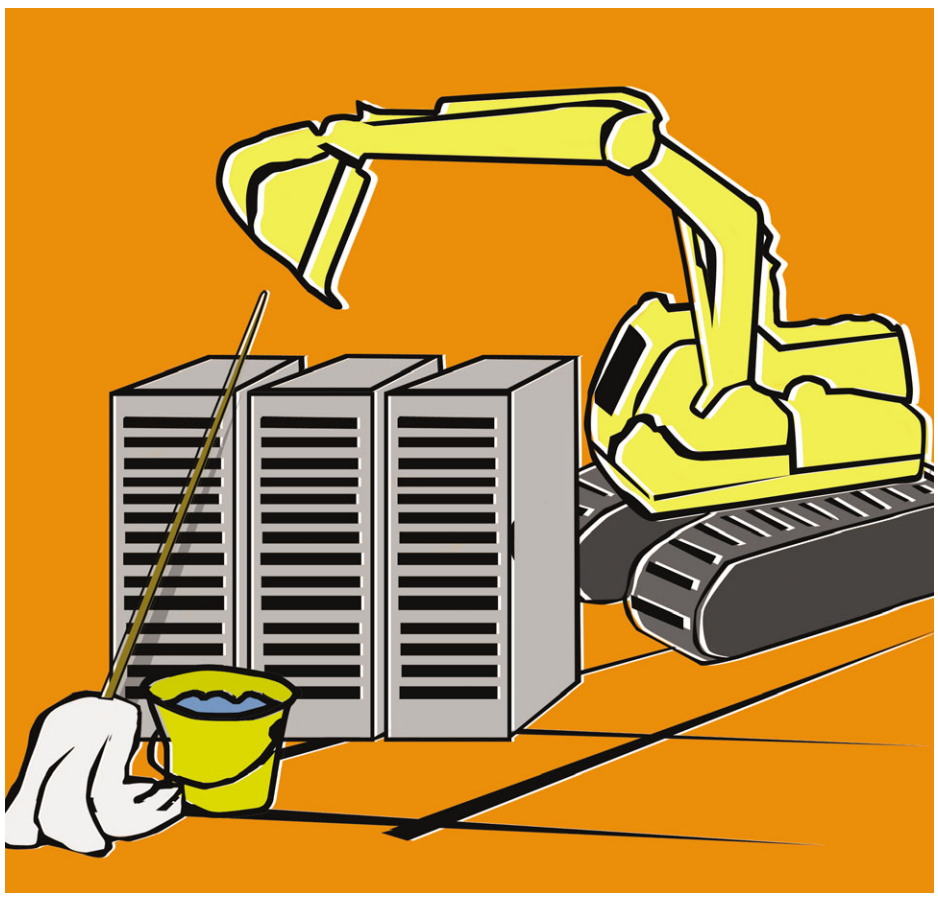

Securing Corporate Desktops

Blocking Malware & Educating Users Can Help Keep Your Systems Safe

by Don Reisinger

• • •

When IT managers are busy trying to solve network issues, desktop security problems may not always sit atop their list. With so many other issues that need to be dealt with, it's sometimes easy to overlook the very real possibility of malware, spyware, viruses, and other harmful processes that could quite easily infect network computers and wreak havoc on the entire company.

IT managers need a way to confront malware and create an environment in the workplace that not only secures desktops but leaves IT managers free to go about their daily routines without too much worry about troublesome processes.

Desktop Dilemmas

Unfortunately, securing desktops has never been so difficult. As more employees become comfortable with installing applications and opening potentially harmful emails, IT managers have their work cut out for them.

"Most Windows PCs ship with default admin rights, giving all users power to make changes and modifications to their system settings, system files, and Registry settings, both knowingly or unknowingly," says Ken Fitzpatrick, chief marketing officer at Persystent Technologies (www.persystent.com), a company that specializes in solutions for common business problems. "Any of these actions can wreak havoc on

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IT managers need to ensure that security is both respected and valued among users.

In This ISSUE

COVER FOCUS

Data Center Construction

Whether you're currently undergoing data center construction, renovation, or expansion or know it's on the horizon, these articles provide tips and advice you need.

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Proper email management is essential to avoid potential financial and legal troubles, yet according to a recent survey, only 49% of businesses can say with confidence that their electronic documents are accessible and accurate.

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Poor communication and lack of procedural policy result in orphaned accounts remaining active.

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Although remote tech support services may not be appropriate for every SME, adding outsourcing into the support mix could free up time and prevent the need to add to in-house head count.

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■ **AirDefense** released Live View, a feature for AirDefense Enterprise that gives network administrators a real-time view of current wireless network activity to help troubleshoot connectivity or bandwidth issues. ■ **Arkeia Software** announced the EdgeFort 500 Series, a federated data protection, all-in-one backup appliance. ■ **BLADE Network Technologies** announced a 1/10 Gigabit Ethernet network virtualization switch for IBM BladeCenter. ■ **Entuity** released Eye of the Storm 2008 Service Pack 2, the latest release to its network management suite. ■ **Pelican** released the 1090 Hardback Case for laptops. ■ **SECNAP Network Security** added the SME-150, or Email Security Gateway Powered by SpammerTrap, to its antispam product line. ■ **WatchGuard Technologies** is enhancing its unified threat management offerings to include greater performance, scalability, security, investment protection, and end user choice. ■ **WIN Enterprises** announced the PL-60760 network security appliance.

EACH WEEK

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1. **What is the size of your company (how many employees)?**
   - ☐ Less than 10
   - ☐ 10 to 99
   - ☐ 100 to 199
   - ☐ 200 to 499
   - ☐ 500 to 999
   - ☐ 1,000+

2. **How often do you purchase computer hardware/software?**
   - ☐ Weekly
   - ☐ Bi-weekly
   - ☐ Monthly
   - ☐ Quarterly
   - ☐ Annually
   - ☐ No Involvement

3. **What is your annual computer hardware/software purchasing budget?**
   - ☐ $0 to $9,999
   - ☐ $10,000 to $24,999
   - ☐ $25,000 to $49,999
   - ☐ $50,000 to $99,999
   - ☐ $100,000 to $249,999
   - ☐ $250,000 to $499,999
   - ☐ $500,000 to $999,000
   - ☐ $1,000,000+

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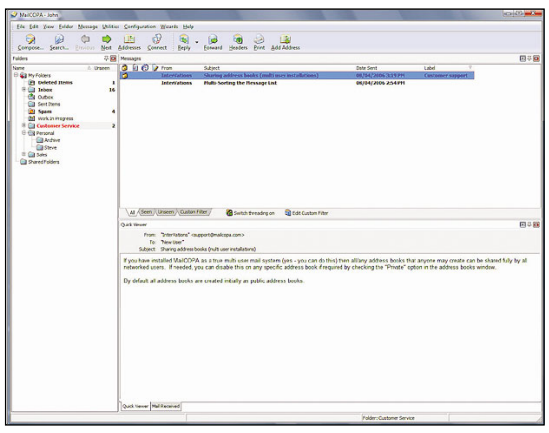
Handle Multiple Users & Email Addresses

InterVations' MailCOPA Email Software Simplifies Email



InterVations MailCOPA updates all shared email users in real time, displaying critical message information.

CHECKING VARIOUS EMAIL addresses of co-workers or looking through your own accounts can often be a time-consuming burden. InterVations MailCOPA v. 9 is a multiuser email program for Windows that can help you manage multiple email addresses. If you have a team of employees using multiple email addresses on multiple computers, MailCOPA ensures that all emails are secure, stored centrally, and available immediately to the people who need to access them.

MailCOPA can bring together each employee's emails from multiple accounts and make it easy to share emails across the network. MailCOPA lets a team of employees answer messages without the risk of emails being answered multiple times by different workers. MailCOPA updates all shared email users in real time, displaying information about which messages have been opened or replied to. The program provides a simple, efficient way to manage help desk tickets, technical support requests, and any information stream from clients and prospects.

The interface is customizable, and you can create macros and templates to personalize correspondence. Messages can be threaded for easy viewing or locked to ensure they won't be deleted.

InterVations MailCOPA

Starts at $39.95 for a five-user, single machine license; 30-day trial version available

Manages multiple email addresses, ensuring emails are secure and centrally stored

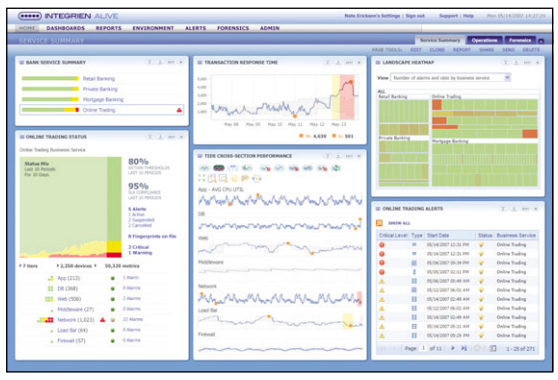
(508) 833-1660

www.mailcopa.com

INTERVATIONS Innovation on the Internet

Monitor Infrastructure Intelligence

Get The Most Out Of Your Applications With Integrien Health Check



Integrien's Health Check service provides a summary of transactions, trading, and tier cross-section performance.

TO EFFECTIVELY MONITOR the progress of applications and services, enterprises must determine where internal issues originate. Integrien offers a new systems management service for this purpose: Integrien Health Check.

Health Check uses the data center operations solution Integrien Alive to access historical data and analyze business performance. Companies are first required to provide 60 to 90 days of past infrastructure data. As Health Check deciphers the causes of brownouts and outages, it captures models of problematic behavior so companies can identify recurring bad patterns. Through Health Check's insight into the "heartbeat" of a specific application, users can observe how applications are performing based on static threshold results.

To understand the association between business performance, user experience, and IT communications, Health Check employs an advanced correlation method to develop a PMDB (Performance Management Database). A PMDB analysis includes the following reports: application behavioral analysis report, "top influencers" report, and a root cause forensics report. This database can supply crucial information regarding the interrelation of infrastructure components, enterprise operations, and user practices.

Integrien Health Check

Application service that pinpoints IT performance problems

$35,000

(949) 788-0555 x 2200

www.integrien.com

INTEGRIEN™ POWERING PREDICTIVE IT

Multiplatform Migration

Ease Migration Pains With PlateSpin's PowerConvert Version 7.0

EFFICIENCY IS KEY in any data center, but it can be difficult to achieve when you need to move and rebalance workloads among different types of environments and platforms, a need PlateSpin addresses with PowerConvert Version 7.0.

PowerConvert Version 7.0 is designed to operate in a heterogeneous environment to simplify the management of server workloads. Version 7.0 increases support for Red Hat Enterprise Linux, 64-bit Windows Server, and Citrix XenServer environments, as well as image-based disaster recovery capabilities and improvements to migration speed for large-scale deployments.

Support for Linux migrations includes P2P (physical-to-physical) and V2P (virtual-to-physical) capabilities. P2V (physical-to-virtual) is supported for 64-bit Windows environments, and Citrix support includes X2P (anywhere-to-virtual) and V2I (virtual-to-image). PowerConvert's incremental imaging enables users to import and export images from a repository of server workloads, improving backup and disaster recovery and reducing costs.

With a drag-and-drop interface, users can remotely decouple workloads from a server and stream them to another host, physical or virtual. In essence, PowerConvert is designed to enable users to maintain service-level requirements by optimizing and relocating workloads quickly.

Also new is improved transfer speed for workload migrations partially courtesy of Server Sync, which offers testing capabilities that can be done over a variety of network types to reduce downtime and maximize migration integrity.

PlateSpin PowerConvert Version 7.0

Per-use license (one-time license): $175
Per-workload license (perpetual use): $425

Provides support for migrations across a variety of different environments and platforms

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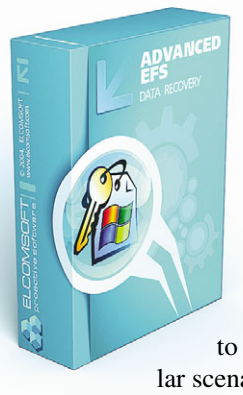
SECURITY JULY 4, 2008

Restore Access To EFS-Encrypted Files

Advanced EFS Data Recovery Decrypts Protected Files



MICROSOFT ENCRYPTING File System (EFS) is an integral part of Microsoft Windows operating systems that enables users to protect their files against unauthorized access.

The EFS appears transparent to the user, providing on-the-fly encryption and decryption of data with strong cryptographic algorithms. The ease of use and transparency to the end user creates a false impression of impeccability of the Encrypting File System in the eyes of users, who often forget about the encrypted files when they reinstall Windows or transfer a disk into a new, upgraded computer.

Elcomsoft Advanced EFS Data Recovery decrypts the protected files and works in all versions of Windows 2000, XP, 2003, Vista, and Windows Server 2008. The recovery is still possible even when the system damaged or can't be booted, or when some encryption keys have been tampered with.

Advanced EFS Data Recovery quickly and efficiently decrypts files protected with EFS. Scanning the hard disk directly sector by sector, the program locates the encrypted files as well as the available encryption keys and decrypts the protected files. The direct access to the file system allows Advanced EFS Data Recovery to recover encrypted files in the most difficult cases, even if the disk with data is only available without a valid user account to log in into system or other similar scenarios.

With Advanced EFS Data Recovery, instant access to EFS-protected files is often possible. Supplying a valid password to the user account (or a previously used password) or an account that serves as a data recovery agent (Administrator account by default) can often provide on-the-fly decryption of the protected files.

Elcomsoft Advanced EFS Data Recovery

Standard $149; Professional $299

Restores access to EFS-encrypted files

+7 495 974 1162

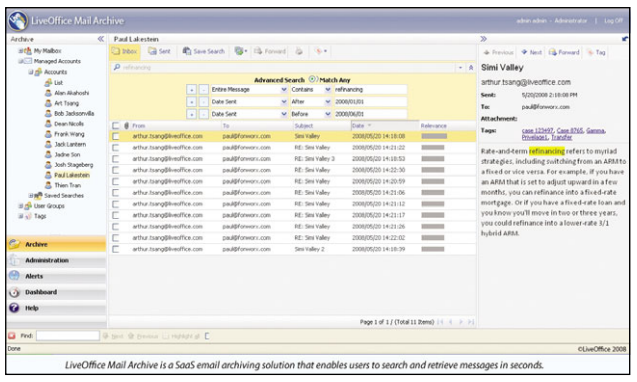
efs.elcomsoft.com

ELCOMSOFT PROACTIVE SOFTWARE

MESSAGING & TELEPHONY JULY 4, 2008

Convenient Mailbox Management

Email Archiving For Enterprises Of Any Size



IT and HR can conduct an advanced Mail Archive search of user accounts by message, date, and content.

REGARDLESS OF A business' size, forward-moving organizations must respond to the increasing volume of emails filling user inboxes. Email archiving is a necessity for maintaining an efficient exchange of information, but this can become a challenge when IT resources are limited.

LiveOffice Mail Archive offers an archiving, compliance, and e-discovery solution for customers who want to minimize storage costs yet protect their organization at the same time. This SaaS platform uses Web 2.0 along with cloud computing to execute quick search and retrieval.

Through full compliance, LiveOffice Mail Archive enables companies to centralize and search the email repository, as well as identify user misconduct within individual messages. Unlimited mailbox storage gives users the ability to view and recover both archived messages and attachments. Discovery provides rapid search response and communication protection.

LiveOffice Mail Archive SaaS is designed to help IT simplify archive management strategies and secure email data without placing a burden on internal finances.

LiveOffice Mail Archive

Cloud storage archiving platform for streamlining user emails

$8 per mailbox, per month; includes unlimited storage and personal archive access for end users

(800) 251-3863

www.liveoffice.com

LiveOffice Mail Archive®

STORAGE JULY 4, 2008

Manage Archived Data

Navigate Your Information Stores With B&L's Archived Data Manager

ADM™ Archived Data Manager

THE ABILITY TO effortlessly search for a single piece of information amid a sea of data is a dream come true for many organizations. With simple organization in mind, B&L Associates has created ADM (Archived Data Manager), a Web-based application that combines historical backup catalogs and organizes them for easy access and management of offline archived data.

Using B&L's patent-pending data extraction technology, ADM can quickly load a server's backup catalog from popular tape backup solutions, including Symantec's Veritas NetBackup, EMC's Legato NetWorker, CA's ARCserve, and HP's Omniback II and Data Protector. ADM features a simple view of a company's backup catalog information and an easy method of searching files by backup application, backup sever, backup client file name, date/time, and expiration date.

B&L highlights ADM's compliance with the amendments to the Federal Rules of Civil Procedure regarding historical backup data. ADM's file-level search makes file discovery quick and easy, which reduces the amount of tapes sent out for content indexing. In accordance with other state and federal laws, ADM features alerts to archived files that are ready for expiration, letting organizations quickly reduce their historical data and avoid related liabilities.

ADM features vast accessibility; once Archived Data Manager has been installed on one computer, it can be accessed from any computer with an Internet connection, making enterprise-wide use possible. Other features include rapid data extraction, enabling ADM to load a server's backup catalog into the ADM database without interrupting normal business procedures.

B&L Archived Data Manager

Provides a single view of backup catalog information and an easy way to organize and search for files

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www.bandl.com

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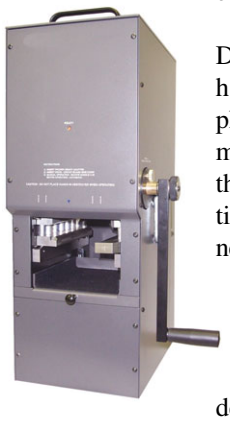
STORAGE JULY 4, 2008

Hard Drive Destruction With No Caveat

Verity Systems' VS7000 Hard Drive Destroyer Prevents Data Theft



THE DISPOSAL OF computers requires careful forethought; not only should electronics be disposed of in an environmentally friendly manner, but obsolete hard drives often contain sensitive data. Simply tossing an old hard drive in the trashcan is not effective disposal; anyone can retrieve the drive and access the data it contains, even if all the files on the drive have been deleted and erased. Leaving data on a discarded hard drive is unwise for any computer user, but it can be disastrous for a business. Physically destroying a hard drive is a surefire way to ensure that no data can ever be mined from a particular device.

The Verity Systems VS7000 Hard Drive Destroyer is specially designed to render a hard drive completely useless. It's completely self-contained, needing only a minimal amount of hand cranking to operate; this makes it particularly useful if a situation arises wherein expeditious disposal is necessary but electricity is unavailable.

The VS7000 can destroy any standard hard drive or laptop drive in less than 15 seconds with only eight turns of the hand crank. A special ratcheting feature makes destroying multiple hard drives simultaneously or crushing especially resistant hard drives a minimal effort.

The VS7000 works by pressing down on a hard drive, bending it approximately 90 degrees. In doing so, the platters are bent and the heads, motor, and circuit boards are damaged, rendering the drive useless and the data unrecoverable.

Verity Systems

$4,125

Manual, portable device that physically destroys hard drives to prevent data theft

(800) 642-5151

www.veritysystems.com

VERITY SYSTEMS

MarketPlace NEWS

DoJ To Investigate Yahoo!/Google Partnership

CITING CONCERN for anticompetitive practices, the U.S. Department of Justice has announced plans to further investigate the developing partnership deal between Yahoo! and Google. Yahoo! had announced plans to include Google-supplied advertisements alongside its search results in a deal worth an estimated $800 million per year in revenue—a deal antitrust experts are concerned would lessen competition in the online search and advertising fields. Google and Yahoo! have agreed to delay the deployment of their combined efforts for a period of three and a half months, during which the DoJ will review and evaluate the deal's lawfulness.

ICANN Expands Top-Level Domains

BEGINNING AS early as next year, companies and individuals could register and be able to operate their own Internet domains. ICANN (the Internet Corporation for Assigned Names and Numbers) unanimously approved the change to generic top-level domains. The new expansion means, for example, that *Processor* could have its own top-level domain, ".processor." Currently, Web sites are limited to 21 top-level domains, such as .com or .org. ICANN says that the person or organization applying for the domain must prove it can operate the Web site; pricing for the new domains has not yet been set.

Microsoft Buys Powerset

LESS THAN THREE WEEKS after its deal with Yahoo! fell through, Microsoft announced plans to purchase Powerset, a search-engine startup company based in San Francisco. Powerset is developing semantic search, technology that will try to glean meaning from search queries and Web pages instead of just using keywords or previous or related searches to find appropriate links. Microsoft plans to integrate Powerset into its Search Relevance unit; a Powerset spokesperson said the company's new technology will gain a wider audience much sooner with Microsoft than it would on its own. Neither company has disclosed the financial terms of the deal.

RIM Posts Substantial Q1 Profit

FOR ITS FISCAL first quarter that ended May 31, Research In Motion, the maker of the BlackBerry, reported its profit was more than double what it was a year ago, increasing from $223.2 million, or 39 cents a share, last year to $482.5 million, or 84 cents per share, this year. However, the figures were still slightly below analysts' expectations. Revenue for the quarter was up 107% year over year to total $2.24 billion. The company also added 2.3 million new subscribers during the quarter, about 100,000 more than expected. RIM forecasts Q2 sales to be between $2.55 billion and $2.65 billion and earnings between 84 and 89 cents a share.

IBM Acquires Platform Solutions, Stirs Up Antitrust Concerns

AROUSING CONCERNS of antitrust violations, IBM announced that it has acquired mainframe and computer hardware vendor Platform Solutions, a company that it had filed suit against just two years ago for patent infringement. The CCIA (Computer and Communications Industry Association) has voiced antitrust concerns because it believes the acquisition will create an IBM-dominated market with no room for competition and could impact PSI customers' capacities to use open systems-based mainframes, as IBM's products are proprietary. While the merger could fall below the financial line for mandatory antitrust review, the CCIA is urging authorities to investigate the deal regardless.

Siemens Plans Job Cuts

ALTHOUGH THE COMPANY has not made the official announcement, a person who has been briefed on the plans said that German electronics and engineering firm Siemens plans to cut about 17,200 jobs, consisting mostly of white-collar positions. Of the total layoffs, 6,400 will be in Germany, the source said. The cuts are part of a company reorganization intended to reduce costs and streamline operations; the company will restructure itself into three primary sectors: energy, industry, and health care. Previously, 70 national companies had been overseeing Siemens' overseas business, but now it has decreased that number to 20.

Palm Posts Loss

PALM LOST $43.4 MILLION, or about 40 cents a share, during the fourth quarter of fiscal 2008. That compares to a net income of $15.4 million, or about 15 cents a share, a year ago. Its fiscal 2008 year-end results also showed a loss of $110.9 million, or $1.05 a share, compared to a profit of $56.4 million, or 54 cents a share in 2007. Despite the losses, Palm posted strong sales of smartphones. During the fourth quarter, it sold 968,000 units, up 29% from last year's fourth-quarter figure. Full-year sales were also strong, with sales of 3.2 million smartphones, up 19% from a year ago.

Global PC Sales Stay Strong

ISUPPLI HAS REPORTED that despite the troubled U.S. economy, worldwide first-quarter PC sales remained strong, with HP, Dell, and Acer topping the sales list. iSuppli reported an increase in sales of 69.9 million units in the first quarter—12.1% more than in Q1 of 2007—a figure that iSuppli sees as good news in the face of a sluggish economy in the United States. For its part, however, IDC believes that though the U.S. economy has not yet affected the worldwide market, it might in the quarters to come.

Ad Spending To Grow At Impressive Rates

GLOBAL SPENDING ON online ads is expected to be about $65.2 billion, or about 10% of total ad spending, this year, according to research firm IDC. By 2011, IDC expects the numbers to hit $106.6 billion, or about 14% of the total advertising market. That's a growth rate of between 15 and 20% a year, which IDC researchers say is a "phenomenal rate" compared to more mature types of advertising. Keyword-based search advertising will continue to be the most popular format, according to IDC, followed by display and classified ads on Web sites. The United States is expected to retain its lead in total advertising and online ad spending.

Storage Power, Cooling Costs Rise

THE AMOUNT OF money it takes to keep disk drives powered up and cool topped $1 billion for the first time last year and will amount to $1.8 billion worldwide this year, according to new research from IDC. And that number is expected to grow to more than $2 billion next year. The research firm says that during the next five years, storage manufacturers will ship nearly eight times the number of hard drives for external arrays as they have shipped during the previous 11 years. Businesses are increasing their storage capacity by about 50% a year. IDC recommends businesses consider solid-state storage and newer storage-related processes such as data deduplication, thin provisioning, and low-power operations.

Oracle Leads Database Market

A RECENT REPORT from IDC has revealed that the global relational database management systems market jumped 12.6% to $18.8 billion last year, up from $16.7 billion in 2006. In the lead once more was Oracle, which snagged 44.3% of the market with a growth in revenue of 13.3%. IBM and Microsoft came in second and third, respectively, with IBM taking a 21% market share and Microsoft capturing 18.5%. IDC attributes the market growth to new advances and innovations in database technology but also to the fluctuations in currency; the weakened U.S. dollar has resulted in increased revenues outside the United States.

Former HP VP Charged With Stealing IBM Trade Secrets

A FEDERAL GRAND jury has charged Atul Malhotra, a former vice president at HP, with allegedly stealing trade secrets from IBM, his former employer, and distributing them. Malhotra worked at IBM from November 1997 through April 2006, and in March 2006 he asked for and received confidential information on IBM's calibration metrics. Four months later, after he had left IBM and started working at HP, he sent emails to two HP senior vice presidents with attachments about the IBM calibration metrics he had obtained. According to an HP spokesperson, once the company discovered the incident, it fired Malhotra and told law enforcement and IBM about it.

WATCH THE STOCKS

This information provides a quick glimpse of current and historical stock prices and trends for 14 major companies in the technology market.

Company	Symbol	Year Ago	June 27 $	July 3 $	% change from previous week
Computer Associates	CA	$25.85	$23.28	$22.28	▼ 4.3%
Cisco Systems	CSCO	$28.10	$23.61	$23.12	▼ 2.08%
Dell	DELL	$28.71	$22.25	$22.81	▲ 2.52%
Electronic Data Systems	EDS	$28.12	$24.57	$24.70	▲ 0.53%
Google	GOOG	$534.34	$528.07	$537	▲ 1.69%
HP	HPQ	$45.58	$44.58	$43.44	▼ 2.56%
IBM	IBM	$106.58	$120.05	$119.54	▼ 0.42%
Intel	INTC	$24.59	$21.49	$20.66	▼ 3.86%
McAfee	MFE	$35.40	$34.37	$33.47	▼ 2.62%
Microsoft	MSFT	$30.02	$27.63	$25.98	▼ 5.97%
Oracle	ORCL	$20.07	$21.29	$20.73	▼ 2.63%
Red Hat Software	RHT	$21.83	$21.17	$21.04	▼ 0.61%
Sun Microsystems	JAVA	$5.22	$10.96	$10.63	▼ 3.01%
Symantec	SYMC	$19.88	$19.48	$19.12	▼ 1.85%

NOTE: This information is meant for reference only and should not be used as a basis for buy/sell decisions.

Upcoming IT Events

- JULY -

ISSA Forth Worth
July 16, 11:30 a.m.
The City of Fort Worth Building
275 W. 13th Street
Fort Worth, Texas
www.issa-cowtown.org

ISSA Puget Sound
July 18, 5:30 p.m.
Olympic Room,
Microsoft Main Campus
Building 27
3009 157th Place NE
Redmond, Wash.
www.issa-ps.org

SANSFIRE 2008
July 22-31
Washington, D.C.
www.sans.org

ISSA Baltimore
July 23, 4:30 p.m.
Sparta Inc.
7110 Samuel Morse Drive
Suite 200
Columbia, Md.
www.issa-balt.org

National Institute of Governmental Purchasing
July 26-30
Charlotte, N.C.
www.nigp.org/Events/Forum.htm

- AUGUST -

LinuxWorld Conference & Expo
August 4-7
San Francisco, Calif.
www.linuxworldexpo.com

AFCOM DFW
August 5, 2 p.m.
Anixter
1601 Waters Ridge Road
Lewisville, Texas
www.afcom.com

CompTIA Breakaway Conference
August 5-7
Orlando, Fla.
breakaway.comptia.org

Next Generation Data Center
August 4-7
San Francisco, Calif.
www.ngdcexpo.com

AFCOM Central Texas
August 7, 11:30 a.m.
Marie Callender's Restaurant
9503 Research Blvd.
Austin, Texas

SHARE
August 10-15
San Jose, Calif.
www.share.org

AITP Nashville
August 14, 5:30 p.m.
Holiday Inn-Brentwood
760 Old Hickory Road
Brentwood, Tenn.
www.aitpnashville.org

AITP Washington, D.C.
August 14, 6:30 p.m.
Alfio's Restaurant
4515 Willard Ave
Chevy Chase, Md.
aitpwashdc.ning.com

Intel Developer Forum
August 19-21
San Francisco, Calif.
www.intel.com/idf

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PRODUCTS AT WORK

Paragon Software Solves Partitioning Woes

Web Development Business Implements Partition Manager

by Drew Robb

• • •

IT'S NO FUN messing around with overcrowded partitions. If you don't pay close attention during system setup and accept the default settings, in these days of bloated software and operating systems, you are likely to end up with relatively small system partitions. Once that happens, it won't be long before you have the problem of either freeing up space on that partition or migrating the system files to a new one.

Until recently, for example, Microsoft SBS (Small Business Server; www.microsoft.com) shipped with a small default system's partition for the C: drive. As a result, Web Enterprise Builders (www.webentpr.com), a Web development business based in Glen Oaks, N.Y., frequently experienced partitioning woes.

"The chronic lack of space resulted in constant server disk maintenance and occasional client downtime," says Richard J. Nicolois, technology officer at Web Enterprise Builders.

Expanding Small Business

Web Enterprise Builders began life in 1996 as a business dedicated to Web development for small companies and schools. Since 2000, however, it has expanded its scope to include client/server applications, server installation, maintenance and support, hardware evaluation, consulting, and installation. As such, it now has a more diverse clientele in financial, legal, medical, dental, photography, manufacturing, collectibles, sanitation, sporting goods, fashion styling, fuel oil delivery and service, children's clothing, insurance, and cellular rentals.

"Although we do everything from computer repairs to Web site development, our core expertise is in supporting small businesses with their technology," Nicolois notes. "We are involved in technology selection, installation, and post-installation management."

The company operates 27 servers running SBS 2003. All are Dell PowerEdge machines of various ages. The most recent ones are Dell PowerEdge 840 servers with 4GB of memory, mirrored drives ranging from 250 to 500GB, and Intel Xeon multicore processors. Two of these servers have hot-swappable drives, and all are configured with RAID 1 for data protection. Another three servers at Web Enterprise Builders have Windows Server 2003, and 30 servers are used for running local-area networks. The organization uses these servers for such functions as setting up and maintaining client email servers (both POP3 and SMTP) and hosting about 45 Web sites.

According to Nicolois, the typical client is a firm with between two and 20 workstations running Windows XP Pro or Windows Vista Business Edition workstations that are connected to a Small Business Server 2003. About half of the server clients are in the legal profession. Competition in this sector of the market is tough, however; countless smaller technology firms, as well as national operations such as Geek Squad and others, service the SME market.

That makes it imperative to use time as efficiently as possible. Partitioning issues at Web Enterprise Builders were eating up valuable hours. As mentioned earlier, SBS 2003 comes with a default setting of 12GB that the C: drive uses as the system partition. When the company added in the operating system, Microsoft Exchange Server, Microsoft SQL Server, as well as applications that might be housed on the C: drive, space was at a premium.

"Some clients had an additional burden with applications or data that required space on the system drive," says Nicolois. "We would have to do things like delete all temporary storage or move the Swap file, Roaming Profiles, Exchange data stores, and as many applications as possible to the D: drive."

While this might sound easy, in practice it involves a whole lot of administrative time. In addition, it opens the door to data loss, client downtime, and possible lawsuits. "Reallocation of space is a frightening thought," Nicolois says. "Data loss or an unstable server will severely hurt our reputation and may result in legal action against us."

Partition Manager Server provides the ability to conduct partitioning operations of all kinds, including resize, merge, and split partitions.

Partitioning Choices

Web Enterprise Builders studied the market for a suitable tool. The company decided to implement Partition Manager by Paragon Software (www.paragon-software.com). By gaining the ability to resize, merge, split partitions, and redistribute free space, Web Enterprise Builders solved its C: drive hassles.

"Partition Manager relieved us of having to constantly clean and reallocate space," says Nicolois. "This has improved client stability and server performance."

He continues, "Partition Manager had a superior multiuser license, and we were sure we would need to reallocate other servers. Both products had a GUI interface, and both ran relatively quickly."

Web Enterprise Builders started using the Paragon product last summer, purchasing Partition Manager Server Edition 8.5 Build 1681. It provides the ability to conduct partitioning operations of all kinds, including resize, merge, split partitions, and redistribute free space. Partition Manager can also initiate new hard drives and do conversions to different file systems.

A safe partitioning feature protects data by automatically backing up critical files. Thus even if a system crash occurs during the partitioning process or other types of corruption take place, the files are safeguarded. Further, users can securely dispose of all the data on the hard disk before discarding those drives.

Time Saver

Nicolois says that Partition Manager saved Web Enterprise Builders time by eliminating the need to have to clean up servers and reallocate space on machines when they would fill up. This led to a substantial upgrade in client stability and overall server performance.

"We have a relatively large number of clients, and the key to our success is having the client run with as little intervention from us as possible," he notes. "Partition Manager makes the decision to reallocate much more likely since we are confident the process will work. Rather than moving data stores, swap files and applications, it is more cost-effective for the client to have the server reallocate—typically a two-and-a-half-hour process (once the backups are done) for a typical server."

To date, the company has reallocated four servers. In each case, this took up to three hours of processing time. According to Nicolois, at no time did the reallocation result in the server becoming unstable, inoperable, or losing data. He referred to this as a "one-and-done" approach, as opposed to constantly having to move server data.

But IT people are inherently cautious. So before Nicolois ran the first reallocation on a client's machine, he built a temporary server and ran it there. Once he knew it worked, he ran it on his server. Only then did he feel confident enough to run it on a client's server. "If I did not have confidence in a product, I would not touch it," he says. "And the client really appreciates not hearing from us about reallocation matters." P

Paragon Software Partition Manager Server

Maximizes server performance via partitioning and hard disk management; provides a full range of features, including resizing partitions without data loss, copying partitions to a spare disk, solving boot problems, rescuing partitions and recovery, and other complex operations

"We have a relatively large number of clients, and the key to our success is having the client run with as little intervention from us as possible," says Richard J. Nicolois, technology officer at Web Enterprise Builders (www.webentpr.com). "Partition Manager makes the decision to reallocate much more likely since we are confident the process will work."

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SECURITY

JULY 4, 2008

Keep An Eye On Network Traffic

Palo Alto Networks' PA-2000 Series Of Firewalls Offers Affordable Protection

COMPANIES THAT HAVE remote branch offices and swelling ranks but limited IT staff face vulnerabilities to security threats.

Palo Alto Networks addresses these needs with the PA-2000 family of midrange firewalls. The firewalls enable midsized enterprises, as well as those with remote locations, to have comprehensive visibility and policy control over network flow and the applications therein, all at a cost-effective price.

Features of the PA-2000 series, which consists of the PA-2020 and PA-2050, include purpose-built hardware, identification technology, and PAN-OS, a security-specific OS with integrated networking, threat prevention, and management features.

Other features include App-ID, User-ID, and Content-ID. App-ID provides visibility and control of hundreds of applications, and it enables policy enforcement according to application, category, underlying technology, behavior, and risk. App-ID functions regardless of application port, protocol, encryption, or evasive tactic.

For user- or group-specific policy definition and reporting that integrates with Active Directory, the PA-2000 firewalls sport User-ID. The Content-ID feature facilitates real-time, broad-based threat prevention, URL filtering, and file blocking. The PA-2020 model features throughput of 500Mbps, while the PA-2050 offers 1Gbps.

The firewalls boast a high-speed backplane and up to 20 traffic interfaces and dedicated out-of-band management interfaces.

Palo Alto PA-2000 Series Firewalls

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Provide cost-effective firewall protection for midsized enterprises or those with remote branches

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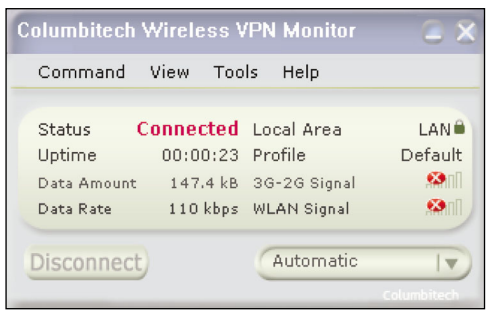
NETWORKING & VPN — JUNE 27, 2008

A Greener VPN

Columbitech's Mobile VPN Conserves Battery Power On Your Mobile Devices



With transparent access to applications and enterprise content, mobile users can work from any network connection with Mobile VPN.

VPN IS ESSENTIAL for business travelers, but many mobile users find that using a VPN connection quickly drains the batteries on their mobile devices. Columbitech's Mobile VPN requires 40% less battery power than traditional VPN tools, enabling secure remote access to the corporate network without crippling the battery life on the traveler's laptop or mobile phone.

Mobile VPN is completely software-based, so IT staff members don't need to install additional, dedicated VPN servers. The use of existing hardware resources provides energy savings and lowers the company's capital expenses. And Mobile VPN's software-based approach also allows you to secure wireless legacy equipment, which can help extend the lifetime of network hardware.

Unlike conventional VPNs based on IPSec and L2TP (Layer 2 Tunneling Protocol) for wireline networks, Columbitech's Mobile VPN uses SSL-based VPN with software running at the session OSI level to avoid issues at the application layer. Mobile VPN's session-level architecture allows the VPN connection to meet mobile user demands for stable, transparent use. If a wireless connection drops, Mobile VPN keeps the session open until the user can reconnect to the Internet.

For security, Mobile VPN uses the WTLS (Wireless Transport Layer Security) protocol—the common standard for protecting WAP mobile phone transactions. The strong authentication and encryption tools let remote workers securely transmit confidential data to the corporate network, regardless of location.

Columbitech Mobile VPN

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MESSAGING & TELEPHONY — JUNE 27, 2008

Intelligent Capture & Exchange For Business Communications

Kofax's Communication Server 8.0 Adds Increased Functionality

THE EFFICIENT and highly functional exchange of information is vital to the success of any company. Businesses need to be able to pass information among parties and keep a reliable archive of all messages. Kofax Communication Server 8.0 (known in previous iterations as TOPCALL Communication Server) addresses the need for a single, central communication application.

Kofax Communication Server 8.0 is designed to automate the exchange of information between high-end, mission-critical applications. All inbound and outbound electronic messages in virtually any format—including email, fax, voicemail, and SMS—can be routed across large distributed environments with the server. Further, Kofax Communication Server 8.0 can convert messages from one format to another and archive each one.

Kofax Communication Server 8.0 can be configured as a high-volume enterprise fax server, but it can also be connected to applications such as those from SAP, Microsoft, Novell, IBM, and other ISV systems. A number of new features have been introduced in this version of Kofax Communication Server, among them VMware server virtualization support, advanced email functionality, support for H323 and SIP, and enhanced FoIP (Fax over IP) capabilities. It also supports disaster recovery systems and environments such as Lotus Notes 8, SAP NetWeaver 7.0, and Windows Vista.

Kofax Communication Server 8.0

Offers enhanced support for FoIP, advanced email functionality, and virtualization support

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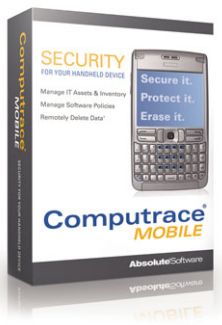
SECURITY

JUNE 27, 2008

Computrace Technology Goes Mobile

Absolute Software's Secure Data & Asset Management For Handhelds



AS BUSINESSES OF every type and size go more and more mobile, an important need arises: keeping all those mobile devices secure. Computrace Mobile from Absolute Software offers IT asset management and remote data delete software to address these needs. Based on Absolute's Computrace technology for desktops and laptops, Computrace Mobile provides companies with central management capabilities for their handheld mobile population.

With Computrace Mobile installed on a device, IT administrators can remotely delete all or selected files, which helps prevent sensitive data from falling into the wrong hands and meets compliance standards. Admins can do all of this through a single interface. Further assistance is available through Absolute Software's Customer Center.

Once the Computrace Agent (the technology that "calls home" if a device is lost or stolen) is installed on a device, users can customize reports or select from any of the preconfigured ones to glean information on hardware, configuration, user profile, and installed software. From the password-protected Computrace control panel installed on the device, users can force a test call; view the time, type, and success of the test call; view ESN; view version information; and change the password.

Absolute Software Computrace Mobile

Can be added onto an organization's existing Computrace product; pricing is dependent on the package type

Provides secure IT asset management and remote data delete capabilities

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Computrace MOBILE

STORAGE

JUNE 20, 2008

Meet The Newest RAID

NetCom USA Introduces RAID Storage Systems For Critical Data

THE NR6 FAMILY of RAID storage systems is the newest member of NetCom USA's storage solution offerings. Available in capacities of 2, 4, and 8TB with data transfer speeds up to 400MBps, NR6 storage systems are a fast, reliable solution for storage of mission-critical data.

NetCom USA's NR6 family of storage products is ideal for increased network storage capacity, medical image storage,

HD video/audio productions, and near-line backup.

Businesses generate more data than ever before and require fast, continuous access to their information. The NR6 family of storage systems provides protected storage of important information including emails, accounting reports, marketing assets, engineering projects, and creative productions —quickly and safely—while remaining cost-effective.

NetCom USA provides proven RAID technologies for data protection that secures information and ultra-fast access to data for increased productivity.

Features include:

- A factory-matched HBA (host bus adaptor) for PCI, PCI Express, or PCI-X
- Compact 2U rackmount design
- Dual hot-swappable power supplies
- Removable and lockable drive trays for added security
- Easy installation (often completed in just minutes)

The NR6 systems provide safe, economical storage expansion for IT networks and support Windows, Linux, and Macintosh operating systems. RAID levels supported include 0, 5, 6, and 10 for maximum performance and data protection.

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Starts at $4,649

Available in capacities of 2, 4, and 8TBs with transfer speeds up to 400MBps

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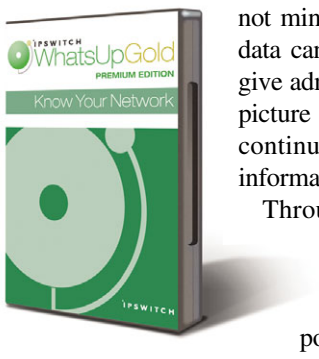
SECURITY

JUNE 20, 2008

Network Monitoring For SMEs & Beyond

Ipswitch's WhatsUp Gold Version 12 Gets Bigger & Better



BUSINESSES GROW CONSTANTLY, and networks must adjust to changing demands. Yet, as important as it is for a network to be able to scale upward, every company has to start somewhere. Having network management tools that can grow with a business from a small enterprise to a large one is valuable.

WhatsUp Gold from Ipswitch has been addressing this issue for over 15 years. The most recent version, WhatsUp Gold 12, has added several new features, including Split Second Graphs, which allow administrators to more quickly identify any problems and take proactive steps toward resolving issues—in seconds, not minutes. Additionally, real-time data can be added to full reports to give administrators a more complete picture of network health, which is continuously updated as real-time information flows in.

Through the various workspace views, administrators can see current device usage data via the InstantInfo pop-ups feature just by hovering the cursor over device or network interface links. Also new are the Web Task Manager and Web Performance Monitor, Web-based tools that extend the functionality of Windows tools to every user.

WhatsUp Gold is designed to provide easy-to-use management and monitoring interfaces, transparent upgrade paths, and low total cost of ownership. With a bevy of plug-ins on the way, WhatsUp Gold can be expanded to suit the needs of any enterprise.

Ipswitch WhatsUp Gold v12

Standard: $1,995
Premium: $2,595
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Network monitoring software for any size enterprise

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SECURITY

JUNE 20, 2008

Email Archiving With Data Integrity

ArcMail's Defender U3160 Improves Productivity & Reduces Strain On IT Resources

EMAIL HAS BECOME the *de facto* means of communicating in an office setting. Archiving all that data is important, and managing it effectively can help a company improve productivity and reduce the strain on IT resources. It's crucial to ensure data integrity so archived data can't be altered.

ArcMail Technology addresses these needs with Defender U3160, a standalone appliance with 16TB of storage that provides comprehensive archive and data management. The appliance operates seamlessly in the background. Both administrators and end users can use a simple, Web-based interface to search for and retrieve archived email data. ArcMail Defender U3160 can be used either in the office or remotely.

Admins have a variety of abilities with ArcMail Defender U3160, including being able to monitor system settings and produce reports to ensure that emails are being successfully archived. Once data has been archived, it's protected by data integrity and encryption technology to ensure that data that has been backed up and subsequently restored can't be altered.

ArcMail Defender U3160 is easy to install, use, and manage and captures all inbound, outbound, and internal email with the mail server's journaling function. Operating on the Linux platform, the appliance is compatible with Microsoft Exchange, Lotus Notes, Groupwise, and other mail servers with journaling functionality.

ArcMail Technology ArcMail Defender U3160

$34,999

Provides email archiving with data integrity and encryption

(866) 417-6495

www.arcmailtech.com

ARCMAIL TECHNOLOGY

CLIENTS — JUNE 20, 2008

Secure Mobile Computing

Dolphin 7600 Now Includes GSM Wireless Technology & Windows Mobile 6

MOBILITY IS A MUST for business professionals. To access important data at any time is invaluable, which is why Honeywell Imaging and Mobility equipped its Dolphin 7600 Mobile Computer with GSM wireless technology and Microsoft's Windows Mobile 6.

With GSM wireless technology, the Dolphin 7600 allows users to stay connected no matter where they are. Wireless Full Area Networking, combined with Bluetooth, 802.11, and GSM/GPRS EDGE, enables real-time data exchange and voice communications onsite or offsite.

The addition of Windows Mobile 6 enables users to be productive while they're traveling, with connections to email, calendars, and contacts. Windows Mobile 6 also has the ability to read and create Word and Excel files, as well as view PowerPoint presentations. The familiarity of a Windows operating system makes mobile computing simple and intuitive.

The Dolphin 7600 uses a 2.8-inch VGA color display for both viewing and touchscreen use. Its backlit number and letter keypad is strategically arranged to enable one-handed operation. The Dolphin 7600's small, ergonomic design and durable construction is useful in both field and onsite operation.

In addition to its new features, the Dolphin 7600 Mobile Computer is integrated with Adaptus Imaging Technology 5.0, which allows users to capture a wide array of data such as barcodes, digital images, and signatures. This feature is especially useful for retail, parcel and postal delivery, field services, and task management applications.

Honeywell Dolphin 7600 Mobile Computer

Handheld mobile computer equipped with GSM wireless technology and Windows Mobile 6

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PHYSICAL INFRASTRUCTURE — JUNE 20, 2008

RapidNetRail

HellermannTyton & Damac Products Work Together To Provide One Innovative Solution

THE RAPIDNETRAIL system from HellermannTyton and Damac Products helps maximize your data center space. The system supports HellermannTyton's RapidNet pre-terminated network cabling solution and Damac Products' Extreme and Co-Location Series cabinets.

This solution uses zero rack mount space by incorporating RapidNet within the 19-inch cabinet rails. RapidNetRail features a patented quick-mount rail design that allows for cassette adds, moves, and changes without interrupting rack-mounted equipment in a fully populated cabinet. It's designed to accommodate both overhead and raised floor cable routing while still maintaining a 24-inch wide footprint.

These rails meet the EIA 310-D industry standards and still maintain a 19-inch rackable surface. Ports can be put where you need them to align connectivity with your servers. Up to 24 RapidNet looms can be installed in either copper and/or fiber combinations, with a maximum of 144 ports for copper and a maximum of 288 ports for fiber.

HellermannTyton's RapidNet pre-terminated plug-and-play system does not require onsite termination or certification testing; it's been verified to reduce installation time by 85% over traditional methods. RapidNet is available in copper and fiber modular configurations and offers performance and reliability for critical applications.

You can choose from two Damac Products storage cabinets: the Co-Location cabinet is a secure, multiple compartment cabinet designed for a co-location environment, and the Extreme Series supports the high equipment density demands you find in data centers.

RapidNetRail

A system combining pre-terminated network cabling and a choice of cabinets

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SECURITY — JUNE 20, 2008

Web Security For Every Size Of Enterprise

Aladdin's eSafe v6.2 Proxy Expands Security Options For The eSafe Family

INTERNET-RELATED SECURITY THREATS are nothing new, but they're as dangerous as ever. Checking for Internet threats in real time is a powerful way to combat malware of every kind. Aladdin Knowledge Systems' family of eSafe products is designed to address security issues on multiple levels. The latest addition to the arsenal is eSafe v6.2 Proxy, a Web-security application for both in-line and proxy implementation.

By virtue of its implementation options, eSafe supports virtually any network environment. Protection occurs in real time and is designed to help companies protect data, improve productivity, and enable compliance. eSafe can be deployed as a native proxy that integrates Microsoft ISA or as an in-line bridge/router, forwarding proxy, or ICAP proxy.

eSafe v6.2 Proxy is designed to inspect all HTTP, HTTPS, and FTP over HTTP traffic thoroughly to protect the network from viruses, spyware, spam, Trojans, and more. Aladdin designed eSafe v6.2 Proxy to provide complete protection, high performance, and intelligent and thorough inspection.

The eSafe family is a flexible security package that can be installed in enterprise environments in a variety of different modes. It's designed to work transparently, checking Web activity at the gateway to avoid impacting network performance.

Aladdin Knowledge Systems eSafe v6.2 Proxy

Starts at $3,500

Flexible Web-security application for any enterprise network

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Aladdin SECURING THE GLOBAL VILLAGE

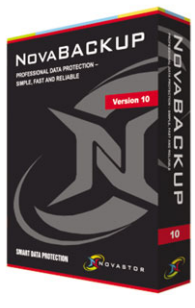
STORAGE — JUNE 20, 2008

Customize Backup & Recovery

NovaStor's NovaBACKUP 10 Provides Local & Online Data Protection

DATA PROTECTION IS NOT ONLY CRITICAL for computer users, it's essential for the defense of PCs and servers. To secure user data, an SME must set a backup system in place.

NovaStor's NovaBACKUP 10, a comprehensive data protection and disaster recovery solution, supports both local backup and online storage. In the event of an onsite disaster, NovaBACKUP 10 takes a snapshot of the entire system, which enables fast restoration of a local or network source. Online recovery can copy or mirror information to FTP, Internet storage accounts, or corporate servers.



In terms of flexibility, NovaBACKUP 10 enables users to restore all files or select specific files for backup. Users can also customize backup times and, with the flexible scheduler, choose the right routine for automatic backups so they can track when their data is processed. Other convenient features include Smart Select backup for photos, music, documents, or emails and plug-and-play support for devices such as DVDs, CDs, Blu-ray discs, USB devices, and tapes.

NovaBACKUP 10 comes in three versions: Professional, Server, and Business Essentials. NovaBACKUP 10 Professional offers basic backup and recovery for single workstations running Win2000/XP/Vista and features 2GB of free online storage for one year. NovaBACKUP 10 Server is designed for Windows 2000/2003 Server and includes 5GB of free online storage. NovaBACKUP 10 Business Essentials offers 10GB free online storage for a year along with priority support. This version is suitable for SMEs running a single SQL and/or Microsoft Exchange Server.

NovaStor NovaBACKUP 10

Data protection and disaster recovery software that users can customize

Professional $49.95; Server $199.95; Business Essentials $499

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NOVASTOR

Data Center Construction: Planning & Design

The Perfect Infusion Of Expertise Is Paramount To Effective Execution

by Christian Perry

• • •

THERE IS PERHAPS no more foreboding task in IT than planning and designing a data center. As IT continues to grow more aligned with the business side of organizations, that preparation can, in theory, eventually portend the future of the entire organization. Whether building from scratch or renovating or expanding an existing data center, there are multiple elements to consider in formulating the essential plan.

Building New

According to Benjamin Pasley, manager at Lee Technologies (www.leetechnologies.com), situational awareness when initiating a new data center development project stems from the connection between the new facility and business goals and objectives. By carefully determining the factors of that alignment, an organization can build a framework that effectively takes into account the stakeholders' interests when determining the location for a new facility.

Site selection is a critical process in the planning phase of a new data center. Pasley says that within this process exists a bounty of considerations, including econometrics, demographics, site infrastructure, natural and man-made hazards, and legal and regulatory business drivers. In terms of demographics, proximity is particularly crucial.

"Proximity can be a good news/bad news situation," says Bob Mobach, a Registered Communications Distribution Designer (a telecommunications certification) at Logicalis (www.logical.com). "On the one hand, proximity to an airport makes for easy access. On the other hand, airplane crashes are possible. Logicalis has one client with a data center in a hangar. Railroads can generate chemical spills that require evacuation and thus prevent access to the data center."

Geographical zones can play a large role in determining the best location for a new data center, not only for environmental concerns, such as earthquakes, hurricanes, tornadoes, and floods, but also for cost. Logicalis Senior Vice President Eric Linxweiler notes that a company could build a data center on cheaper land in a location such as central Washington, but accessibility could be an issue. You could solve the accessibility problem by building in New York City, but the land is far more expensive, and you'll deal with other problems, such as a heightened risk of terrorism.

The concept of green IT can also influence site selection. "If you build a data center in California, power is likely to be coal-generated and expensive. If you move the data center to the Northwest, you will probably use cheaper and more reliable electricity generated with hydropower," Linxweiler says. "People have shut down data centers and moved to Washington simply because of the cost of power."

New With The Old

The expansion or renovation of an existing data center is absent the grueling task of site selection, but plenty of other challenging factors weigh into the process. Pasley says that one of the foremost factors to consider is the degree to which the power or cooling load of the IT or communications equipment being served by the facility's existing systems infrastructure has changed.

"For example, what are the existing capacities of the systems vs. the new total load capacities that are required? How old are such systems, and in what condition are they? Is there a well-maintained maintenance record for the facility, and what does it reflect regarding systems operations and maintenance practices?" Pasley says.

Certain conditions in existing spaces can prompt the idea that renovation or expansion isn't necessarily the best idea. Linxweiler relates the story of a customer in Tacoma that has an existing data center in a basement. "You would never design it to be that way today because basements are notorious not just for flooding but also for water drips," he says.

Design Dynamics

In the design phase, Pasley stresses the importance of leveraging the associated site selection framework to the benefit of the facility. High-density equipment such as blade servers and power and cooling devices create challenges that heighten the importance of planning for enough capacity at all ends of the data center. Couple those challenges with the need to stay in tune with regulations such as Sarbanes-Oxley, HIPAA, and SAS 70, and data center facility designers are now approaching their work from new angles.

"While energy efficiency is a premium factor to address in the design of today's data center, its resiliency is directly tied to the value it provides to an organization and those who depend on its reliability and availability," Pasley says. "Even with the best design in the world, if the actual data center's build-out doesn't match the design intent, the facility could ultimately be vulnerable to failures."

According to Mobach, critical design factors include Tier rating (achieved with full certification through the Uptime Institute or a security level that matches Uptime requirements); building structure obstacles (roof structure, wall structure, ceiling heights); whether the space can effectively host a data center (Is there a loading dock? Is there sufficient storage space?); and floor construction (raised floor or no raised floor).

"If they don't think carefully ahead of time, people can find problems, like a floor that isn't strong enough to handle rolling heavy equipment on it or an elevator that isn't big enough to take the equipment to a higher floor," Linxweiler says. "It's amazing how often we go to a customer who has to cut the wall open to get a component in or out."

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Culling Contractors

The success of any major data center project hinges heavily on the contractors doing the work. Choose the right contractors, and the project will be as solid as the planning and design itself. Choose the wrong contractors, and the project will fail, regardless of the plan and design.

"Contractors should be able to submit a qualifications package indicating their knowledge, skills, and abilities in supporting the design and construction of a data center," says Benjamin Pasley, manager at Lee Technologies (www.leetechnologies.com). "Such data would include the size of the company and number of crews, including the type of work the contractors have performed. Also, it is very important to determine their ability to supply specialty engineering or construction services in support of controls integration, testing, and commissioning."

If possible, Pasley says, seek contractors that have worked for the company in the past or try a new contractor on smaller jobs. During that process, look for consistency in the contractors' pricing from job to job, and once a relationship is established, you can consider vendor management a strategic endeavor, he says.

Data Center Timeline

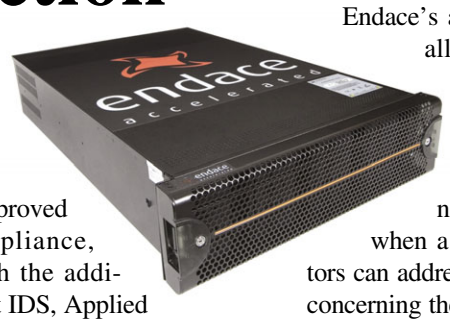
The following timeline, provided by Logicalis' (www.logical.com) Bob Mobach, a Registered Communications Distribution Designer, maps out the course of a typical data center project. He estimates that the total time for a medium-sized (3,000-square-foot) data center is about six to seven months for a remodel or six to 12 months for a new build.

Assessment phase: Three to five weeks
Initial planning phase: Two to four weeks
Construction design and permitting: Four to 12 weeks
Construction: Four to 12 weeks
Move: One to seven weeks

SECURITY JUNE 13, 2008

Core-To-Edge Detection

Endace's NinjaProbe Adds Snort IDS Support & Data Mining Capabilities



MONITORING THE security of a network requires network administrators to make sense of a constant flow of information from a variety of fronts. Malicious threats and anomalies of all kinds must be recognized and dealt with handily, and administrators must rely on their equipment to help them keep the network safe. All of this puts more pressure on NIDS (network intrusion detection systems) to do their job well.

Endace has improved on its NIDS appliance, NinjaProbe, with the addition of 10G Snort IDS, Applied Watch Command Center Agent, and data mining capabilities. NinjaProbe is powered by Endace's DAG (Data Acquisition and Generation) technology. The new features are open-source and facilitate high-speed packet capture, intrusion detection, and analysis. They are designed to be easily deployable, powerful, and secure.

Endace's acquisition of Applied Watch allows NinjaProbe to integrate well with Snort IDS' management tools. NinjaProbe captures all incoming traffic to disk, from the edge of the network to the core, so that when a rule is triggered, administrators can address the problem and mine data concerning the event. And because the platform can operate on segments up to 10Gbps with continuous indexed rotary storage, analysts can collect and study data both before and after an alert.

The appliance's features can be managed remotely, including for Snort rule definition, download, and alerting, as well as data mining and platform configuration. Other features include traffic filtering and Netflow record generation, which facilitate data capture, performance management, traffic monitoring, and electronic surveillance to meet the full range of requirements.

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Need More Data Center Space?

Continued from Page 1

Options For Adding Space

Before expanding or building a data center, Stahl advises companies to optimize the space they already have. He says that while computer rooms are typically well-planned and utilized when new, over time, as managers add new systems and move equipment, entropy takes over, and space efficiency degrades. A common mistake is using expensive Tier II space for systems such as fax or print servers that don't require such resiliency. Stahl says the first step to reclaiming some valuable real estate is to inventory systems and identify those you can safely relocate to more conventional facilities. Removing some of the flotsam can often provide enough breathing room to forestall an expansion.

Using data center space more efficiently is the next tactic in construction project avoidance. Server consolidation, using high-density virtual server farms and large SAN arrays, are an obvious means of increasing space utilization, but Stahl says that other infrastructure components, such as PDUs, UPSes, and LAN switches, can also be compressed. "Try and use the smallest number of subsystems you can," Stahl says. "You need to declutter the room."

One drawback to increasing server density is a concomitant increase in power and cooling requirements. One way to avoid having to redesign a room's entire HVAC system, according to Stahl, is to partition the room into high- and low-density areas. He says that enhancing a small section of high-density space with in-row cooling and higher-capacity PDUs to accommodate the added thermal and electrical load is easier than redesigning the entire facility.

Sometimes decluttering, consolidation, and high-density renovation aren't enough to address rapidly growing IT needs. Before calling the contractor, it's worth investigating a new concept: the data center-in-a-box.

Sometimes decluttering, consolidation, and high-density renovation won't be enough to address rapidly growing IT needs. Before calling in the contractor, it's worth investigating a new concept for augmenting server capacity that doesn't use expensive raised floor space at all. The modular data center, aka data center-in-a-box, is a concept Sun Microsystems (www.sun.com) popularized that turns a standard cargo container into a portable computer room that you can deploy in a common warehouse.

Calling In The Contractor

When no amount of renovation and upgrading will meet exploding data center requirements, it's time to consider various construction options. According to Peter Sacco, president of PTS Data Center Solutions (www.ptsdcs.com), modifying and augmenting existing space is usually more cost-effective because it minimizes the amount of new equipment, as you can reuse much of the existing power and cooling infrastructure. Stahl adds that renovation is also an opportunity to improve a room's density. He finds many clients using 12 to 14 square feet per rack, whereas a well-designed rack system can reduce this to 7 to 9 square feet.

The downside to an in-place expansion is the risk of disruption to continuing operations. Vic Berger, data center technology specialist at CDW, notes that expansion projects involve modifying existing power and cooling systems, which, unless previously designed with redundancy, can trigger accidental service disruptions.

While expanding an existing facility is the cheaper option, in some situations it's impossible. Berger says that an increasingly common constraint, particularly in urban areas, is a lid on the available power. Another physical limitation Sacco often encounters is inadequate "slab-to-slab" height—that is, a building's vertical clearance from floor to ceiling, for both a raised floor and ventilation ductwork. Companies facing these constraints are forced to either build a new facility or lease space from a colocation vendor.

Although building a new data center is more costly than expanding, Sacco says it's much less risky to current operations. The build vs. lease decision largely hinges on a company's financial preferences, according to Berger. He notes that some firms want to avoid construction's large up-front capital expenses, preferring instead to roll these costs into an ongoing colocation lease. While Sacco acknowledges these concerns, he finds that colocation engagements usually incur higher costs over the long term.

Costs & Schedule

Building or expanding a computer room involves so many variables unique to a particular company and location that simple guidelines regarding cost and schedule aren't possible. Stahl finds that construction projects typically run a minimum of 18 months with widely varying costs. Info-Tech estimates a room's cost at $600 to $900 per square foot, although facilities with higher availability requirements (Tier III or greater) can easily top $1,000.

All the experts advise companies embarking on an expansion project to employ data center consultants for planning, financial analysis, and detailed design. As Info-Tech's Stahl notes, "The implementation of a data center facility requires significant knowledge that is not likely to be possessed by an enterprise's in-house staff."

Adding computer room capacity is one of the biggest projects most data center managers will undertake, and given the risk, time, and expense, it's always better to wring more usable space out of existing facilities. Ridding a room of clutter while doing some minor upgrades to increase server density may result in a surprising amount of new capacity for minimal cost. When this isn't adequate, expanding an existing room is usually cheaper but may not be feasible given building limitation or power constraints. Building a new data center is generally the last but sometimes only option—a multimillion-dollar project that calls for experienced consultants who specialize in data center construction.

Data Center Expansion Options

Option	Advantages	Disadvantages
Optimize existing space utilization (decluttering)	• Virtually no cost • Quick	• Limited improvement • Potentially disruptive
Minor upgrading to increase server density	• Lower cost • Takes advantage of the latest server, power, and cooling technology	• May require a move to new server, storage, or network hardware • Potentially disruptive
Major renovation	• Cheaper than new construction	• Risk of major disruptions; requires careful planning • May not be feasible in all buildings
Augment space with modular (in-a-box) data center	• Much faster to deploy than new construction • Lower capital expense • Flexibility in siting • Easy to move • More efficient cooling	• Limited hardware availability; not good for heterogeneous environments • Requires high-capacity power and water connections • Requires multiple LAN connections
Expand existing facility	• Less expensive than new construction • Can reuse much existing infrastructure	• Risk of major disruptions; requires careful planning • May not be feasible in all buildings
Build new facility	• Lowest risk to existing operations	• Highest capital expense
Lease from colocation facility	• Low up-front costs and minimal capital expense • Access to skilled IT personnel without adding to internal staff	• Likely higher long-term costs • No control over room design and operations • May not meet claimed Uptime Tier Performance Standards

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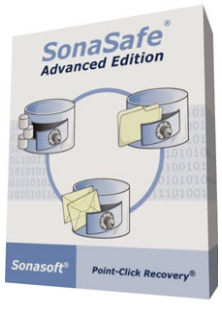
SonaSafe Suite is designed for high availability by continuously updating data that was retrieved from the primary system to the redundant, standby servers. The redundant servers themselves are designed to immediately take over for the primary system in the event of a disaster.

SonaSafe Suite supports SQL 7.0, 2000, and 2005; Exchange 2000, 2003, and 2007; and Windows NT/2000/2003/XP. Backup and recovery options are also available via a bootable CD and can be performed on systems such as VMware and Microsoft Virtual Server. The suite is controlled through a Web-based interface.



New features of the suite include dynamic mailbox backup, which makes larger amounts of mailbox storage possible on an Exchange server. One complete backup is made, so only incremental backups need to be performed in the future, thus eliminating costs. Data retrieval is possible with a few mouse clicks.

Other new features include customizable ports and enhanced replication and recovery capabilities. Customers can now define and open ports for backup and restore functions, which is more secure than doing so on more commonly used ports. File level backup and recovery options are also increased.

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Securing Corporate Desktops

Continued from Page 1

performance and compliance to 'corporate-authorized' configurations."

To make matters worse, enterprise PCs are running more applications than ever before, and as the number of active applications rises, IT staff finds itself bogged down with training and retention and can't focus as much time on the security of the network.

"Five years ago, there was an average of 25 [to] 30 applications running on a PC, and today that number is approximately 75 [to] 85," Fitzpatrick says. "As a result, the IT staff has a tremendous burden of training, retaining, and paying for much more expensive and more highly skilled PC technicians to ensure the security of enterprise PCs."

Plan Of Action

In the realm of enterprise security, there's simply no single solution to making a network safer while still maintaining the kind of output needed to make a business successful. According to David Lineman, president of Information Shield (www.informationshield.com), a company specializing in information security and data privacy policies, establishing a more secure enterprise takes considerable time and effort.

"Reducing the risk from corporate desktops has several components, but the most important is user education," he says. "In the end, it is very difficult and expensive to completely lock down a user—they can always find a way. So organizations first need to make sure that they have acceptable use policies and [that] their users are aware of them and the consequences for not following them."

Lineman continues, "From an IT perspective, the goal is to establish and maintain a secure desktop configuration. This means that you want to issue all mobile devices with some type of standard and then provide ongoing monitoring to maintain and enforce the standard. As soon as users start installing their own software on the machine, the risks increase dramatically."

Although Lineman believes better standards are one of the key components in securing the enterprise desktop, Fitzpatrick has a different take: "Enterprises need to ensure that they have both network security and desktop security products installed, maintained, and updated at all times."

Creating A More Secure Enterprise

It's not always easy to make co-workers understand that installing applications and downloading attachments from unknown sources is detrimental to the organization.

According to Information Shield's Lineman, IT managers should first "make sure they have acceptable use and desktop configuration policies that make sense based on your environment. Second, they need to make sure they have some teeth by having those policies sponsored by the most senior executive and by having real consequences for violations. Third, make sure users are aware of the policies and their role in securing their desktops. Finally, if IT managers can establish technology to monitor and enforce the policies, such as network gateways that monitor traffic and desktop software that monitors configuration, that will further reduce the risk."

But in the world of enterprise computing, sometimes it's necessary to install applications to make sure employees are doing exactly what they should. As Fitzpatrick points out, "Buying a PC tool that can manage and enforce the corporate policy for PCs is a major step forward."

"IT managers should have a PC tool that not only manages and supports desktop policies and security but also maintains and manages updates to the PCs and policies."

As Lineman explains, "The user desktop is the next frontier in information security. As younger workers enter the workforce, there is a demand to use the tools that they used growing up—things like instant messaging, social networking sites, and 'smart' mobile phones. It is a delicate balancing act to offer users enough freedom to do their job but provide enough security to protect the enterprise."

And it's that balancing act that IT managers are constantly confronted with. In an environment where profit is paramount and workers are expected to be doing their jobs, IT managers need to ensure that the business is running smoothly and security is both respected and valued as a key component of the operation.

And although IT managers are still battling technology, their biggest opponents come in the form of co-workers who are trying desperately to do what they want, when they want. And as much as they may try, IT managers may never solve that problem.

"It is important to remember that information security is about people as much as technology," Lineman says. "Policies are not going to be effective unless they are understood by the people within the organization. Organizations should consider providing some form of ongoing security training and awareness for everyone in the organization. Like written policies, training and awareness are required in all data protection laws." P

Three Main Components Of Desktop Security

Ensuring desktop security is not an easy undertaking, especially when users become lax in their practices and attacks seem to come from all sides. As you seek to shore up your desktops' defenses, keep in mind these three objectives.

1. Educate the users. Make sure the employees know what usage behavior is acceptable. Clearly outline and define your company's policy to minimize confusion.

2. Enforce acceptable use policies. Once the users know what's right and wrong, enforce those actions—develop and clarify consequences for breaking company policies, and be sure to put them into action when a policy is violated.

3. Protect the systems. Install network and desktop security software to control any mistakes or outliers. Anti-malware applications will help protect your systems from attacks, and monitoring software lets you keep an eye on employee usage.

A Strong Corporate Policy

Developing a corporate policy for desktop usage is paramount to the safety of your systems. Here are some points to keep in mind when formulating a policy.

- People within the organization must understand the policy, so education should be of high priority. Make the policy concise and easy to understand.
- Ongoing training is a must to instill the qualities expected of employees and will keep the information fresh in their minds.
- Policies must be enforced by upper-level management, who provide consequences if the rules are not followed. Upper-level support lends credibility to the policy in the eyes of employees.
- The policy needs to be fair yet strong enough to ensure security is the first concern.

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Overseeing Data Center Construction

What Role Do IT Managers Play In This Phase?

by John Brandon

• • •

For a small to midsized enterprise planning to construct a new or renovated data center, help is available, at least when it comes to the design and planning phase. Companies large and small will offer services to identify the key requirements for power and cooling, space allocation for storage and servers, technician workspaces, and even plans for future expansion.

Yet one overlooked but critically important aspect to new data center construction is the actual construction itself. Often, IT hands off this brick-and-mortar building process to a construction company, which may have little experience when it comes to the technology inside the new or renovated space. According to Ken Brill, the executive director of the Uptime Institute, IT can be much more involved in construction, and not just as a watchdog. Especially in the SME market, IT can even be the lead on the construction project instead of facilities management or a subcontractor. He says one reason has to do with the changing complexity of IT, in data center construction in particular.

"Building a data center today is one of the most complex projects out there," says Brill. "You're not just upgrading an office building. And this complexity is the same whether you are building a small 1,000-square-foot data center or one that is 100,000 square feet. Failures are going to occur at the intersection of power and cooling, for example. Granted, you will spend more time fixing problems in a 100,000-square-foot facility, but the complexity of the problem is still likely the same."

Other Tips For The Construction Phase

- Inspect all power terminations to make sure they are properly set with a torque wrench; this may also require a note in the contract to allow IT staff to perform this step.
- Inspect UPS and HVAC installations during construction to make sure they meet the design specifications.
- Insist on cleanliness on the construction site and monitor to make sure the work area allows inspection and access.
- Consider inspecting the raised floor after completing to check for dust and proper terminations.
- Conduct air tests for particle counts to make sure they meet requirements.

Advice For Construction Phase

There are several key steps that IT can take during construction. Brill suggests performing load-balancing tests for power distribution, which will require that construction halts while you test services. In fact, you may need to arrange for this testing as part of your contractual agreement. It's important because problems with power distribution are much easier to address during construction than after the site is complete. In a renovation, load-balance tests also give data center managers an opportunity to redesign plans or make adjustments to the data center. The construction phase may last only a few months, but the final build is something you have to live with for years or perhaps decades.

"During the construction, IT should be present and make periodic inspections to ensure that the facility will accommodate their systems," says James A. Stark, the design and build manager at Electronic Environments (www.eecnet.com), a data center design and build company. "Catching a potential problem during the design or construction process will be a lot less costly than having to go back and make additions or changes to the installation after the project is complete."

Tom Condon, a senior consultant with SDI (System Development Integration; www.sdienterprises.com), says IT should look for construction companies that provide a higher standard of care during construction than other jobs. One loose ground wire could cause a persistent server interruption. Another example he cites is that the construction company should allow IT managers to inspect for dust during the build. Dust is one of the key culprits in hardware failures after a data center is constructed, even years after commissioning.

"What may be considered 'normal construction dust' on an office construction project would be unacceptable for a data center project," says Condon. "Excess dust can get sucked into computers in minute quantities, sometimes over a period of years, and end up creating a short in sensitive circuits."

Managing The Construction Project

While it's true that many IT analysts tend to focus on the design and planning aspects of new data center construction, IT should not just do the prep work and then leave the project in the hands of the "experts."

"The owner needs to be involved throughout the construction process to ensure that the facility is built to the specifications," says Condon. "They should have an internal project manager who meets regularly with the construction contractor and the architect, and they should also perform inspections on critical parts of the DC as they are built to ensure that they are meeting the specifications."

Condon continues, "However, because data centers are so specialized, most small to medium business owners would not have a person on staff with the skills to adequately manage the DC construction process. Therefore, many owners hire a DC consultant to represent them during construction. This is an added expense, but it is a small cost when compared to the potential impact on the business if the DC fails to perform as expected."

Being more proactive during construction can pay dividends, especially when most building warranty agreements only last a year, and deficiencies in a data center may not appear for years to come. P

Data Center Construction: Planning & Design

Continued from Page 9

Perfecting The Plan

Whereas the data center design phase can be stop-and-go as the components are assembled, the planning function is more fluid. As such, Pasley explains, some team members may need to adjust their expectations for project outcomes that can entail high degrees of ambiguity—whether real or perceived.

"Thus, it is important to formulate as many questions [as possible] for consideration and resolution by appropriate members of the team, as this will help establish a basis for decision-making to keep the project moving forward," he adds. "This is also one reason why it is important to engender a spirit of cooperation among members on the team. From time to time, the project executive would do well to highlight the fact that . . . the success of the project is dependent on all of the team members . . . working together."

Pasley says that the team members should define and understand project roles and that team members and planners should formulate communications plans to allow for efficient information flow between the different groups. He adds that planners should assess data center facility needs and work with the site selection experts to ensure coordination of requirements and resources. Finally, he recommends that planners order items with long lead times early to avoid delays caused by high demand for products and systems. P

Physical Infrastructure June 13, 2008

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Data Center Moving Day

There Is No Such Thing As "Over Planning"

by Bruce Gain

• • •

Moving is never fun for anybody in an enterprise, especially for those involved in relocating the data center. Unlike other departments that might have more mundane equipment such as desks and filing cabinets that need to go from point A to point B, IT managers have much more important things to worry about. If the move doesn't go smoothly, troubles can range from costs associated with replacing or fixing broken servers to company downtime because critical data and applications were lost in the move.

Given the risks involved when relocating the data center, the first rule to keep in mind when preparing to move is to plan properly. And as a corollary to that rule, it is impossible to overplan.

"You cannot plan enough. Poor planning can lead to extended outage, damage to equipment, and all kinds of other problems," says Michael Petrino, vice president at PTS Data Center Solutions (www.ptsdcs.com). "During the new data center construction phase, you need to have many meetings months before the move to ensure that you have all of the backup plans ready to go for the project."

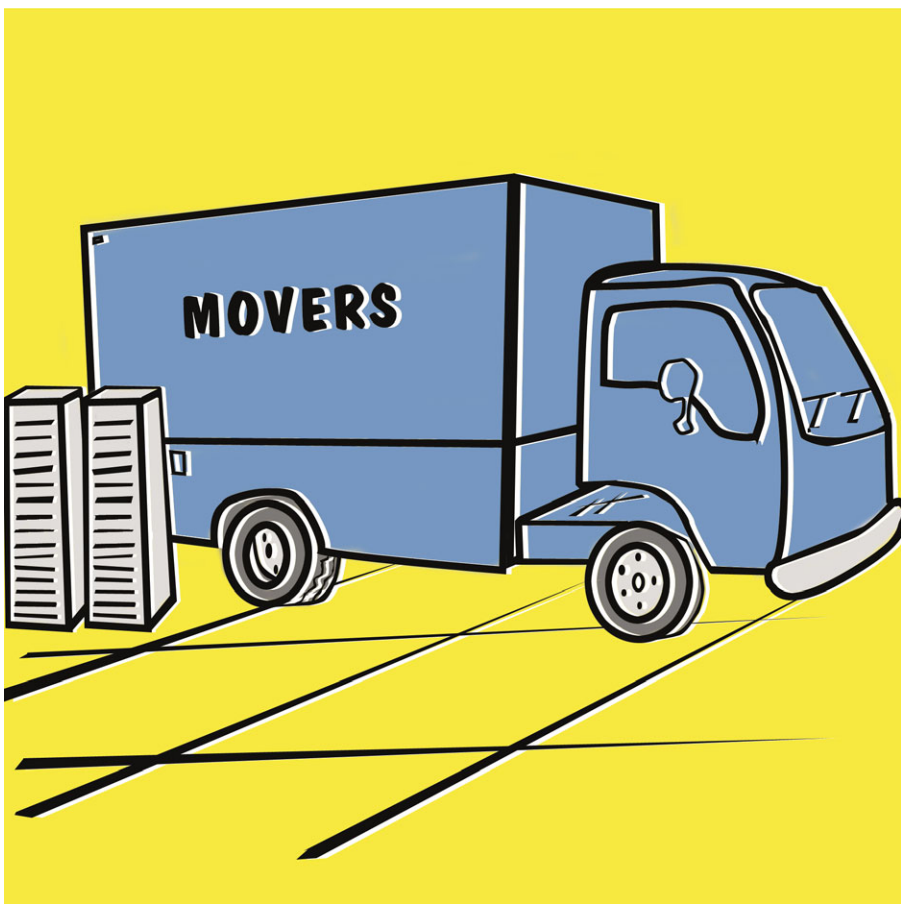
Don't Go There Alone

The moving process is something that the IT staff should participate in. They will need to be intrinsically involved in the planning process and participate in some of the hands-on elements of the move before and after the data center is shut down and rebooted at the new location. Staffers might also need to label equipment before it is shipped or double-check SAN backups before the move. Yet a large part of the moving process is best left to third parties with ample experience in moving data centers. Keep in mind that it's important to check the third parties' references.

"Since this is not an everyday task, [but one] which requires special equipment and handling techniques, we do not advise having employees handle the entire move," Petrino says. "Employees need to be involved in order to handle taking down systems for deinstallation and then bringing the systems back up at reinstallation. Due to lack of experience, employees may inadvertently cause damage to devices due to improper handling and/or packing."

A reputable third party, for example, will use specialized packing materials, such as sea bins with foam, blankets, and plastic, and sometimes use the packing materials from the equipment manufacturer, Petrino says. A consultancy firm should also know which firms are certified to move specific OEM products so the company can maintain warranties.

"You do not just call up any moving company out of the phone book," Petrino says. "Most companies are not insured to cover a [data center equipment] move and custom insurance."



Uptime Costs

For many admins, the perfect move might consist of rebuilding a data center from scratch at the new location. With a generous budget, the ideal new data center might replicate the old site's equipment, applications, and infrastructure. With both the old and new data centers up and running, completing the moving process would merely involve shutting down the old data center and using the new site thereafter. Such a scenario, unfortunately, does not apply to the vast majority of data centers.

Reality dictates that you will have servers and other equipment to transport that cannot be replicated at the new site. This means that when you move your servers to the new location, for example, there might be a period of time when these servers are not operational during the move.

"It depends how much money you are going to throw at it. Businesses are generally going to have some sort of downtime," notes John Matzek, co-chief executive officer of Logic IT Consulting (www.logicitc.com). "You make due the best you can with the budget you have."

Matzek says he once managed a data center move that involved building a new server room so that the old and new data centers were "both running at the same time." Yet the project cost more than $1 million for a 300-user network and does not represent the norm for most data center moves. Less expensive alternatives might involve shutting down and moving more noncritical servers while replicating more mission-critical servers for which downtime is less viable.

"You could bring down your noncritical servers and do a business continuity style plan with all of your critical servers," Matzek says.

The data center move is also a good time to decide what is really working (or not working) at the old location so the new site can offer improvements. "Any kind of move like that should trigger a whole bunch of other questions, like what do we need to do to improve the delivery of our services to the business," says Mike West, managing director of Keysource (www.keysource.co.uk). "It is a good time to decide whether we should actually leave the old hardware there . . . [or] refresh our hardware because it is more efficient."

100 Feet Or 1,000 Miles

The complexity of your move can vary drastically according to distance. As a rule of thumb, Petrino says companies may use truck transport services for moves between 100 feet or 1,000 miles and air transport for moves that are 1,000 miles or longer.

"When air transport is needed, we typically use custom critical service," Petrino says. "Standard overnight service may not be the best answer for a lot of packages."

Even if everything seems to be in order, it's wise to anticipate potential complications. One alternative to mitigate possible disasters is to break the move down into two or three phases, "so if we do hit a problem, then we are not sunk," Petrino says. "If there is a problem, then we are not dealing with a cut-and-run where if you get to the new location, then you might otherwise be absolutely stuck [because you did the move in a single phase]," he says.

Even ultra-intensive planning cannot offset any potential problem. "A data center is thousands of moving parts, while one slipup can destroy the move process. A single power cable, a single piece of software that you haven't configured properly, just a single person who might have a password or a key to a door, can derail the whole process and cost you hundreds of thousands of dollars in various costs," says Andi Mann, research director at Enterprise Management Associates (www.enterprisemanagement.com), whose office recently moved from Australia to the United States. "You might get there and no one has a key to the server room because it wasn't part of a plan. It can be things as simple as that." P

Space Planning

Relocating to a new data center location can also spell opportunities. While the moving process is almost always painful, it is also possible to use the new location to make better use of your new space compared to your old data center. Consolidating and virtualizing server capacity, for example, can help to reduce excess hard drive capacity (as well as the power required to keep the drives running). If you haven't already, you might also think about lowering power consumption and boosting cooling efficiency through hot aisle/cold aisle layouts and other means.

Mike West, managing director of Keysource (www.keysource.co.uk), says, "There are huge opportunities to leverage technologies that are available to get better control over systems and to put them into an environment that should work better in terms of performance and efficiency."

Ethernet Converter

Transition Networks GFEB Series Provides Easy Integration

As a company grows, the need for flexibility and functionality increases, and so does the need for products that will accompany the growth and change. In the past, some Ethernet converters haven't had enough ports or haven't been cost-effective. Transition Networks has set out to solve this problem with the new GFEB series of 10/100/1000 Ethernet converters.

GFEB series products provide an easy way for companies to integrate legacy 10/100 UTP devices into a Gigabit Ethernet fiber network. Also, network administrators have new enhanced features that increase functionality and network management capabilities.

The new GFEB-120 series of 10/100/1000Base-T to 1000Base-X Ethernet copper-to-fiber media converters replaces Transition's GFEB-100 series of media converters. With the new product line, customers benefit from new features such as bandwidth allocation, virtual cable test on UTP port, IEEE 802.1q VLAN tagging and double tagging (Q in Q), IEEE 802.1P QoS, IPv4 Tos/DiffServ, IPv6 traffic class, port-based VLAN to allow unidirectional transmission, RMON counters for each port, Digital Diagnostic Monitoring interface, and the ability to remotely update firmware.

These new converters are fully compatible with the previous models and also include those features found on the GFEB-100 series, including AutoCross, AutoNegotiation (both UTP and fiber ports), Link Pass Through, Pause, Automatic Link Restoration, and switch-selectable speeds.

Transition GFEB Ethernet Converter

Provides an easy way to integrate legacy 10/100 UTP devices into a Gigabit Ethernet fiber network

(800) 526-9267

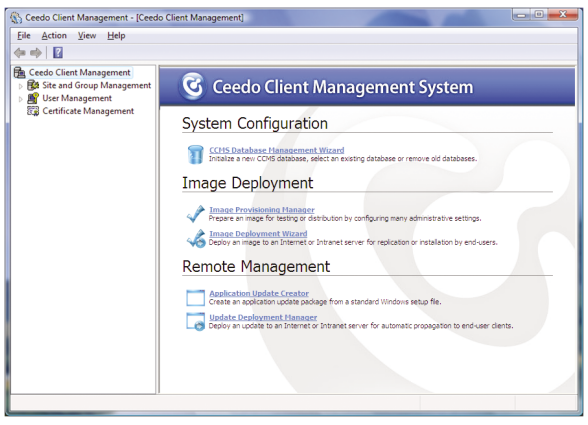
www.transition.com

TRANSITION NETWORKS®

NETWORKING & VPN JUNE 20, 2008

Virtualize Your Applications

Ceedo Enterprise Lets You Access Applications From Anywhere



WHEN TRAVELING PROFESSIONALS are out on the road, it's important to not only have access to important files, but to critical applications, as well. With Ceedo Enterprise, road warriors can have access to both files and applications while leaving their laptops at home. Ceedo Enterprise is an application virtualization tool that can store entire work environments on a USB hard drive or flash drive for light travel.

Ceedo Enterprise separates the applications, application settings, and data from a computer's operating system but still allows the applications to communicate with the operating system. With these features, Ceedo Enterprise offers application portability, remote management, business continuity, and disaster recovery. In addition, Ceedo Enterprise offers users the ability to customize their workspace through their own applications and plug-ins. This process does not require administrator involvement, the workspace is separate from the computer, and the installation of applications onto a Ceedo workspace can be done without packaging.

With Ceedo Enterprise, IT managers can control enterprise applications, install new software, and update user files right away from a remote location. Ceedo can be installed on a USB device in order for installed applications to become portable for use on any PC running Windows 2000/XP/Vista, or it can be deployed in real time to a PC from a network or from the Web.

Ceedo Enterprise

$89 per seat (perpetual license)

Creates a virtual work environment that offers application portability, remote management, business continuity, and disaster recovery

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Ceedo

NETWORKING & VPN JUNE 13, 2008

NX-9000 Sets The Standard For Scalability

Industry's First Gigabit WAN Acceleration Appliance

SILVER PEAK SYSTEMS' NX-9000 is the newest member of the company's NX family of appliances. The NX-9000 is the industry's first Gigabit WAN acceleration product, raising the bar for WAN performance and scale.

The NX-9000 supports up to 4Gbps of bidirectional LAN-side traffic and 1Gbps of bidirectional WAN-side traffic, with 8TB of local data store available for WAN deduplication. The newest Silver Peak appliance delivers up to 10 times the real-time throughput of competitive offerings.

The NX-9000 also includes two 10Gbps interfaces and four 1Gbps interfaces with EtherChannel bonding for physical connectivity between Silver Peak appliances and network elements, which is required for deployment in data center environments. As more hosts turn to multi-Gbps interfaces, the NX-9000 has the capacity required to support the corresponding growth in data volumes.

The NX-9000 is ideal for high-volume data environments and supports more than 256,000 simultaneous TCP flows. It optimizes all enterprise applications, including TCP traffic, real-time UDP traffic, latency sensitive traffic, and applications with dynamic data formats. Plus, NX appliances ensure that data is always secure, at rest and across the WAN.

The NX-9000 utilizes the following advanced optimization technologies to improve WAN bandwidth efficiency and accelerate application performance:

- Network Memory: Works on latency sensitive traffic and both TCP and non-TCP applications.
- Network Acceleration: Employs techniques that minimize latency caused by TCP and other chatty protocols.
- Network Integrity: Silver Peak is the only WAN optimization vendor to address lost and out-of-order packets in real time using adaptive FEC (Forward Error Correction) and POC (Packet Order Correction).

Silver Peak NX-9000

Starts at $259,995

Gigabit WAN acceleration product

(888) 598-7325

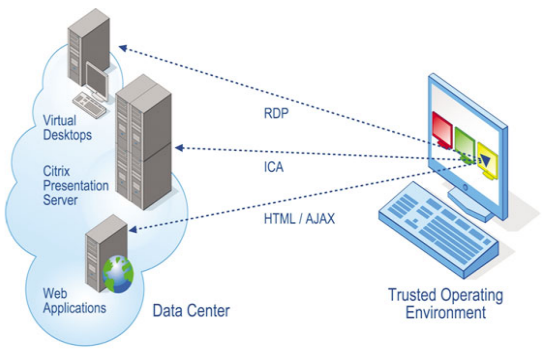
www.silver-peak.com

Silver Peak

NETWORKING & VPN JUNE 13, 2008

Alleviate Endpoint Virtualization Stress

Neocleus' Trusted Edge Provides Simple, Secure Endpoint Solution



AS PROFESSIONALS BECOME more mobile, there is an increased need to keep these employees securely in touch with company resources. But maintaining a virtual connection that is both secure and reliable can be difficult—especially because organizations cannot control the security of an endpoint operated by a customer or employee.

For this reason, Neocleus has launched Trusted Edge, which is designed to provide organizations with a program that connects customers and employees to corporate resources from anywhere in the world, regardless of the state of security. Trusted Edge will address issues that arise when managing and safely deploying applications, data, and services.

Trusted Edge implements a new Type 1, bare-metal hypervisor and a separate virtual trusted environment outside of Windows provided by new security plan and IT management framework. When putting Trusted Edge into operation, desktops will not need to be rebuilt, decreasing end-user downtime and costs. Trusted Edge can run other Windows-based applications upon customer demand and supports RDP, Citrix ICA, and Web interfaces. Authentication and configuration controls offer an easily managed virtual endpoint environment, creating a win-win situation for both IT personnel and users.

Trusted Edge not only provides customers and employees with the flexibility of accessing company resources from anywhere, it also has continuously operating real-time remote confirmation of virtualized environment reliability.

Neocleus Trusted Edge

Base-level user licenses start at $150 per user

Helps IT personnel, customers, and employees manage issues with endpoint virtualization

(201) 309-3042

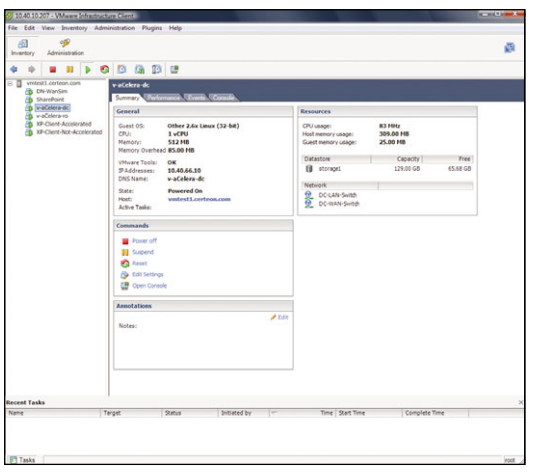
www.neocleus.com

NEOCLEUS Virtualizing Endpoints

NETWORKING & VPN JUNE 13, 2008

Accelerate Applications

Certeon's aCelera Boosts Virtual Efficiency



With the ability to run on any standard x86 system, aCelera Virtual Appliance software can share resources with the rest of your computing infrastructure.

WITH CERTEON'S ACELERA Virtual Appliance software, you can apply the advantages of virtualization to application acceleration without a reduction in application response time. The aCelera Virtual Appliance software delivers up to a 95% reduction in application response time for applications being accessed across the WAN. The software runs on standard x86 hardware in one or more virtual machines, so companies can mix and match application acceleration solutions for virtualized and nonvirtualized environments.

aCelera Virtual Appliances accelerate all network traffic and are optimized to accelerate remote access to specific applications, including Microsoft Office, Microsoft Office SharePoint Server, EMC Documentum eRoom, and UGS Solid Edge. The Certeon aCelera software provides centralized provisioning and is integrated with VMware Virtual Center to enable IT managers to allocate and manage app performance resources wherever needed. This flexibility helps avoid the need for specialized devices at each end of a WAN connection. By adding more virtual machines, IT staff can increase the acceleration capacity as much as needed for specific times or days when application traffic is heavy.

IT managers can reduce their overheard costs by downloading and deploying the aCelera Virtual Appliance software for remote users to help reduce the amount of dedicated hardware in data centers and remote offices.

Certeon aCelera Virtual Appliance Software

Starts at $2,495

Allows you to accelerate application access without dedicated hardware

(781) 425-5200

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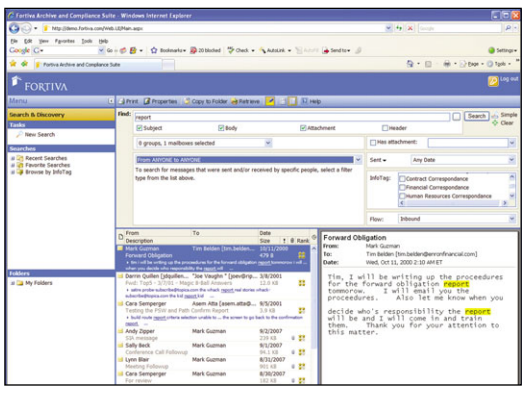
certeon Accelerate Your Business

MESSAGING & TELEPHONY — JUNE 13, 2008

On-Demand Email Archiving

Fortiva Offers An All-Inclusive Email Archiving Solution



The Fortiva Archiving Suite allows you to easily search all archived messages, including attachments, right from Outlook or any web browser

THE MAJORITY OF a company's business-critical data is stored in email; data that can impact revenue, business decisions, corporate reputations, and end-user productivity. With all this at stake, businesses need to ensure that email is securely stored and easily accessed.

Fortiva Archiving Suite gives businesses a secure way to store and access an unlimited amount of historical email in real time without overloading the Exchange server. Fortiva also offers full preparation for legal discovery and provides easy compliance with regulatory rules. The policy-driven system also ensures consistent retention.

Fortiva Archiving Suite automatically captures and indexes all internal and external communications for redundant storage offsite. Users can easily access data within Outlook or a Web browser with guaranteed search performance, resulting in less need to store historical data within the mail server. Fortiva also guarantees data privacy through its DoubleBlind Encryption technology.

As a SaaS solution, Fortiva can be up and running in days, with no up-front capital costs and minimal planning. Fortiva takes care of everything from storage to security, so the archive can be easily managed by existing messaging staff.

Fortiva Archiving Suite

Starts at $1.01 per user, per month for 1,000 users

Email archiving system that lets companies manage their storage, comply with federal regulations, and meet eDiscovery requests

(866) 366-3668

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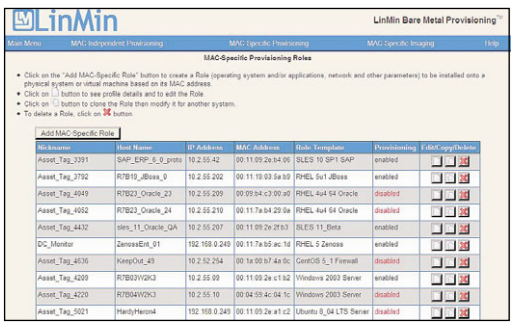
FORTIVA

We Take Care. You Take Control.

NETWORKING & VPN — JUNE 6, 2008

Remotely Deploy Linux & Windows Systems

LinMin Bare Metal Provisioning Makes It Easy



LinMin Bare Metal Provisioning 5.1 lets you perform remote, unattended installs of several OSes.

LINMIN BARE METAL PROVISIONING 5.1 simplifies the unattended deployment of systems and virtual machines on new platforms and adds "green" features and innovative provisioning business rules.

With LBMP 5.1, you can perform remote, unattended installations of Red Hat, Novell, Microsoft, Ubuntu, CentOS, Fedora, and Asianux OSes and applications onto servers, blades, PCs, appliances, and virtual machines. LBMP gives IT staff system control with Fire And Forget Provisioning, while also simplifying one-off or mass system deployments with On The Fly Provisioning.

Install LBMP, upload your Linux and Windows DVDs and CDs, and create system roles such as Novell SLES 10 with SAP or Microsoft Windows Server.

With Fire And Forget Provisioning, you assign system roles to systems with unique network settings, host name, and passwords. Specify the provisioning rule such as Always, Never, Boot To HD (to avoid accidental repurposing), or Provision Only At Next Network Boot, Then Boot To HD (to prepare systems and provision them during the next network boot).

On The Fly Provisioning lets you select the system role from the client's UI or assign a default role for all unknown PXE boot requests.

LBMP also captures and restores entire disk images to help with disaster recovery and to reduce energy consumption by parking power-hungry systems unless needed. Once provisioned by LinMin, systems are turned over to your systems management infrastructure.

LinMin Bare Metal Provisioning 5.1

Starts at $250 or $100/year for 10 systems

Reduces time and cost to deploy or repurpose Linux and Windows servers, blades, and virtual machines

www.linmin.com

LinMin

PRODUCT OF THE WEEK

Keep It Cool, Keep It Moving

MovinCool's Office Pro 63 Offers Big Power In A Portable Package

by Julie Sartain

• • •

Efficient cooling in the data center is paramount for both the equipment and the enterprise, not to mention the economy and the environment. But what happens if the AC fails?

Without a backup air conditioner, IT equipment can heat up rapidly, leaving only a short window of time to act. John Doran, senior manager for MovinCool (800/264-9573; www.movincool.com), says that when servers overheat, they usually shut down before any serious damage occurs to the equipment or the data is lost. But if the more sensitive pieces of equipment in the data center, such as network routers, get too hot, they can be permanently damaged and need to be replaced entirely, often at considerable cost.

In today's data center, not only has the number of servers and routers used in IT facilities increased exponentially, but so has the heat density of that equipment. Accordingly, air conditioning and air-conditioning backup systems have become critical factors for today's burgeoning data centers. And even in the smaller server and telecom rooms, a backup system is no longer a luxury but a necessity.

Portable Solutions

One way to combat the rising need for cooling in the data center is to employ portable cooling units, which provide cooling where it's needed most, especially in the event of a failure in the main cooling system, and allow for scalability without committing to a permanent installation.

MovinCool, headquartered in Long Beach, Calif., offers a line of products that addresses the cooling needs of every consumer, from the data center to the classroom to the largest of industrial facilities.

In particular, the Office Pro 63 was specifically designed for large office spaces and computer rooms. It's a 460V, three-phase system that provides 60,000 ETL Verified BTU per hour of cooling. Designed to cool large spaces with ease, it's a good fit for heat-sensitive server/telecom equipment rooms.

This portable backup system offers convenience with a programmable digital controller for automatic operation after hours and on weekends, plus a condensate pump kit, which makes continuous operation simple and efficient.

Unique Design

"These units are unique because they are self-contained, portable air conditioners. The Office Pro 63 allows for a quick and easy cost-effective installation in a matter of minutes," says Ken Morello, director of sales and service at Topp Portable Air (www.etopp.com) in Aston, Pa.

According to Morello, customers can roll the unit in, exhaust the warm air outside of the space being cooled using flexible duct, and then just plug it in and turn it on. Whenever necessary, the Office Pro 63 can be quickly and easily moved to a different location in the server room (or another room), and the airflow is redirected. When new hot spots develop as a result of adding more equipment or reconfigured racks, the unit is easily repositioned.

"All of the MovinCool units are not only ETL and UL Listed, which are safety certifications, but also ETL and UL Verified, which are performance certifications, and they come with the most complete warranty in the industry," adds Morello.

ETL Verified and/or UL Verified means that the equipment has been independently tested and found to perform at the levels the manufacturer claims, using actual performance data, not calculated data. This type of performance-verification mark is another indicator of high quality, notes Morello.

Doran adds that cooling capacity, measured in BTU per hour or tons (12,000 BTU per hour = 1 ton), is the most basic measure of an air conditioner's ability to cool a given space. Air-conditioner cooling capacity is rated by an industry-accepted standard from the ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers). For portable spot air conditioners, the relevant ASHRAE Standard 128-1989 specifies ambient conditions of 95 degrees Fahrenheit at 60% RH (relative humidity). Unless this standard is used, the cooling capacity of the equipment in question may be much lower than what is claimed.

The Competitive Edge

When choosing a portable air conditioner, Morello and Doran agree that there are many things to keep in mind. These quality-oriented details, which MovinCool aims to provide with its products, are indicators of high-quality equipment that's designed and manufactured with long-term reliability in mind.

For example, Morello advises that above all, a portable air conditioner must be reliable. Look for equipment that is built to the highest quality standards. Check that the fan motors are fully enclosed in protective housings to prevent dust build-up, which, if accumulated on the motors, can absorb moisture, leading to corrosion or electrical shorts.

Examine the casters for durability, Morello continues. Be sure they're securely attached to the frame with a mounting plate and heavy-duty bolts. Ensure that the sheet-metal panels have stress-relief notches at the bends and are attached to the frame at load-bearing points by machine screws and weld nuts. Also, the weight of the fan housing must be supported by a sturdy interior frame panel, he says.

Notice the refrigeration unit itself, adds Doran. It should be hermetically sealed (rather than service valves, which are prone to leaks). Are the refrigerant pipes connected by reducers and expanders or by pinching and brazing, which restricts the flow of the refrigerant, reducing cooling efficiency and long-term performance?

Check the drain pan. It should be fully insulated, not just powder-coated. This ensures that moisture will not come into contact with the metal surface of the pan, protecting it from corrosion and possible leaks.

"These are all standard requirements for the Office Pro 63," concludes Doran. P

MOVINCOOL
THE #1 SPOT COOLING SOLUTION

PRODUCT OF THE WEEK

MovinCool Office Pro 63

Description: Portable cooling unit designed to provide 60,000 BTU per hour of cooling to large office spaces and computer rooms

Interesting fact: In the 1980s, DENSO, MovinCool's parent company, pioneered the concept of workspace spot cooling to meet its own factory needs in Japan. Since then, MovinCool has developed a wide range of portable and ceiling-mount air-conditioning systems for many different applications. MovinCool is now the world's largest manufacturer of commercial portable air conditioners.

(800) 264-9573
www.movincool.com

Office Pro 63 By The Numbers

BTU Per Hour	60,000
Voltage Requirement	Three-Phase, 460V
Total Power Consumption	6.6kW
Dimensions (HxWxD)	64 x 30 x 52 inches
Power Cord Length	6 feet
Operating Conditions	65 to 105 degrees Fahrenheit

SERVICES

June 6, 2008

Protect Your Data & The Planet

Kroll Ontrack Offers IT Media Disposal Programs

Properly disposing of and recycling hardware is an important component in protecting the environment. Especially when dealing with hardware that contains sensitive data, it can be unclear how individuals and organizations should dispose of and recycle materials in the way that protects the data and is environmentally friendly.

Kroll Ontrack recognizes the importance of implementing green initiatives, so it wants to lend a hand to individuals and organizations that would like to find more ways to reduce their environmental impact. The services the company offers protect both vital data and the environment—a win-win situation.

Kroll Ontrack is offering media erasing services to help individuals and organizations discard end-of-lifecycle hard drives. Ontrack Eraser software uses overwriting methods to permanently remove data. Ontrack Eraser services, which Kroll Ontrack specialists perform, provide comprehensive removal of data. Kroll Ontrack specialists use a degausser, a hardware tool that wipes out data using magnetic fields.

The services dispose of certain media by disassembling the good parts for reuse before discarding the storage media. Kroll Ontrack's recycling vendor takes the other parts of the hard drives and storage devices and divides the leftover material into groups, such as metals, circuit boards, copper wiring, and aluminum. These materials are then recycled and reused for other products. Even the components left over are not dumped into landfills or incinerators. Instead, a combination of physical and mechanical demanufacturing methods are used to split up harmful materials from recyclable parts.

Kroll Ontrack Media Disposal Program

Media disposal program protects sensitive data and the environment

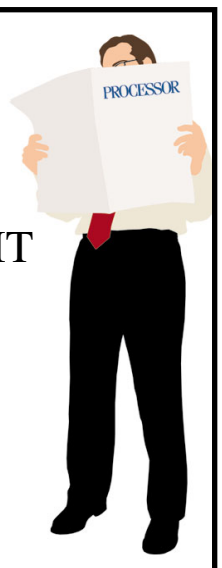
(800) 872-2599

www.ontrackdatarecovery.com

KROLL ONTRACK®

Product Releases

Do you have a new product that data center/IT managers would be interested in learning about?



Send your press release or related product information to press@processor.com.

Clients

■ **BenQ** expanded its Mainstream Series of DLP projectors by adding the MP522 (XGA) projector. The MP522 features all-digital image processing, user-friendly features, and super-quiet operation. Texas Instruments' DLP (Digital Light Processing) enhances big-format viewing with image quality that outshines LCD technology. DLP also enables a filter-free projector design to eliminate costs associated with filter cleaning and replacement. The 522 incorporates BenQ's advanced five-segment Golden Ratio color wheel and BrilliantColor technology. A Closed Caption option enhances viewing for those with hearing concerns, and HDTV compatibility supports up to 1080i. Other features include a Presentation Timer, Quick Auto Search, 30-second Quick Cooling, Panel Key Lock, Security Password, and OnScreen FAQ. Furthermore, Wall Color Correction and 11 preset picture modes ensure optimized color and image quality.

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■ **IBM** announced Cognos 8 Business Intelligence for Linux on System z, which allows workers across organizations to receive information when they need it and quickly make business decisions. The availability of IBM Cognos 8 BI for Linux on System z extends IBM's Information on Demand business strategy. To further support this strategy, IBM has established multiple worldwide System z competency centers to help customers learn about IBM Cognos 8 BI, benchmark the System z, and interact with other IBM products and solutions.

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■ **Oracle** has announced updates for the family of Oracle Berkeley DB Embeddable Databases, including Oracle Berkeley DB 4.7, DB XML 2.4, and DB Java Edition 3.3.

Developers at ISVs, OEMs, and enterprises can now integrate an embeddable database engine into applications, devices, and equipment without human administration. Additionally, all runtime administration is controlled by an unattended application. Each update is designed for high performance and reliability; directly linked software libraries cut out the performance penalty of client-server architectures. Oracle Berkeley DB products are available though dual license and no-cost, open-source license.

Messaging & Telephony

■ **Dialogic** announced that the Dialogic 2000 Media Gateway Series and Broadvox GO! SIP Trunking are now interoperable. Together, the two products are designed to enable SMBs and enterprises to deploy flexible and cost-effective SIP trunking service. Features of Broadvox GO! SIP Trunking include unlimited local calling; discounted, toll-free nationwide and international calling; and E911, DIDs, and local number portability. The Dialogic 2000 Media Gateway Series features a SIP trunk interface, Web-based configuration, and 1U rackmount appliance design.

Networking & VPN

■ **AirDefense** released Live View, a feature for AirDefense Enterprise that gives enterprise IT network administrators a real-time view of current wireless network activity to help troubleshoot connectivity or bandwidth issues. The Live View feature helps AirDefense Enterprise (AirDefense's wireless intrusion prevention system) show IT administrators why Wi-Fi devices may have connectivity trouble, as well as visualize why the wireless technology may be bouncing between access points. With device connectivity mapping and frame capture through a configurable dashboard, IT staff can use Live View to remotely diagnose the problem and determine a corrective action. After changes are made to correct the issue, Live View can help verify that the problem is resolved. Live View is available free to all AirDefense Enterprise customers currently participating in AirDefense's maintenance plan.

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■ **BLADE Network Technologies** announced a 1/10Gb Ethernet network virtualization switch for IBM BladeCenter. BLADE's new switch provides the ability to use six 1Gb copper and three 10Gb SFP+ fiber uplinks concurrently, providing 50% more bandwidth than alternative blade switch offerings. BLADE's new switch applies the principles of Rackonomics to scale out and virtualize data center networks, driving down the total cost of ownership associated with high-performance clusters and virtualized data centers that require an affordable migration path to 10Gb Ethernet. The BLADE 1/10Gb switch features low power consumption; Layer 2/3 support for advanced features, such as OSPF (Open Shortest Path First) and BGP (Border Gateway Protocol); and network virtualization capabilities, such as VMReady.

The BLADE 1/10Gb switch with Nortel/BNT Extensions to IBM BladeCenter Open Fabric Manager I/O virtualization software enables multiple embedded blade server switches to operate as one large virtual switch using stacking. Stacking allows switches to be combined into one logical unit. BLADE's Nortel 1/10Gb Uplink Ethernet Switch Module delivers 104Gbps full-duplex throughput to the IBM BladeCenter enclosure. BLADE's Nortel 1/10Gb Uplink Ethernet Switch Module is currently available; stacking will be supported for IBM BladeCenter in the fourth quarter.

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■ **Entuity** has released Eye of the Storm (EYE) 2008 Service Pack 2, the latest release to its network-management suite. Entuity says the enhanced version will increase productivity of IT operations through automation of processes geared at optimizing network infrastructures. Specific enhancements include better topology visualization and documentation, an

Go to Page 18

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SS-300ES SS-350ES
SS-400ES SS-500ES

ATX12V(v2.2) 12cm Fan Series

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Product Releases

Continued from Page 17

expanded router protocol awareness, and new scriptable device renaming abilities. Functionality includes the ability to add background images in the EYE Connectivity Viewer and automatic discovery of HSRP-active routers and their peers. The release is available for Microsoft Windows Server 2003, Sun Solaris, Red Hat Enterprise Linux, and VMware ESX Server platforms.

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■ **SolarWinds** launched the latest version of its Orion Enterprise Operations Console and Orion Network Performance Monitor, which let users quickly respond to faults and manage network performance issues before they impact business. Orion Enterprise Operations Console installs quickly and doesn't require additional consulting or customization. Orion Network Performance Monitor version 9 now features a Universal Device Poller for gathering data on SNMP-enabled devices and an intuitive Web-based interface. The Orion Enterprise Operations Console and Orion Network Performance Monitor v9 start at $4,995 and $2,475, respectively.

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■ **Sun Microsystems** introduced the open-source Sun GlassFish application server and MySQL Unlimited, which lets users deploy the software on unlimited servers, CPUs, cores, and virtual machines for a flat annual subscription fee. The offerings let organizations of any size cost-effectively reduce their reliance on proprietary software and eliminate the incompatibility problems that plague closed software platforms. GlassFish and MySQL Unlimited pricing starts at $65,000 a year for an unlimited number of servers.

Physical Infrastructure

■ **Pelican** has released 1090 Hardback Case for laptops. Its indestructible, watertight design is constructed with crush-resistant armor. The Hardback is made for 15-inch laptops and can travel in standard soft bags. Other protective features include the heat and chemically resistant shell; shock-absorbing foam interior; and a strong, anodized aluminum latch for enhanced security. Pelican also includes its watertight seal to keep moisture out. The Hardback can also double as a tool kit, medical kit, file organizer, media holder, pistol case, and a test tube holder. Pelican's 1090 Hardback is available for $139.95.

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■ **Perle** has announced that its IOLAN servers now support Microsoft Native Windows L2TP/IPSEC VPN Client. The new feature is available in a firmware download; look for firmware version 3.5 or later. Data centers and businesses use IOLAN servers for console management of remote assets in a secure fashion, including within an IPSec VPN.

Security

■ **Blue Lance** has announced LT Auditor+9 for Windows Service Pack 2. The SP2 release focuses on auditing changes to Microsoft Group Policy by adding 51 new group policy events and six new group policy report templates. LT Auditor+9 SP2 also provides accurate auditing of the Group Policy configuration files and prevents anonymous back door changes to the group policy and accurately reports details of the changes.

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■ **SECNAP Network Security** has added the SME-150, or Email Security Gateway powered by SpammerTrap, to its antispam product line. The entry-level device is aimed at smaller user bases looking for full support for user-based policies, whitelists, and quarantines and reports. Other than clustering abilities, the SME-150 provides the same tools as the upper-end SME-500. The SME-150 combines the use of 40 real-time blacklists, an email sender reputation filter, heuristics filtering, and an email firewall. SECNAP plans to retire the SMB-250 model at the end of this month, although it will continue to support the device. Additionally, special pricing is available to SMB-250 owners upgrading to the SME-150.

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■ **WatchGuard Technologies** is enhancing its UTM (unified threat management) offerings—products that perform firewall, gateway antivirus, and intrusion detection/prevention service—to include greater levels of performance, scalability, high security, investment protection, and end-user choice through its XTM (extensible threat management) and connectivity offerings. WatchGuard's XTM additions include virtual private networking, advanced Web (HTTP and HTTPS), application and content filtering, email and spam blocking, and security for VoIP.

• • • • •

■ **WIN Enterprises** announced the PL-60760 network security appliance that is ideally suited to the demands of high-performance security and other networking applications, such as IDS/IPS, firewall, VPN gateways, NAC, and unified threat management. The platform supports Intel Core 2 Duo and Core Duo processors and Intel's 3100 Express chipset. Other features include support for up to 4GB of DDR2, four Gigabit Ethernet ports with optional bypass function, four 10/100 PCI bus Ethernet ports, a USB port, a console port, a Mini PCI slot, two PCI-X slots supported through optional backplane, and a 16 x 2 LCM and four-button keypad. The PL-60760 appliance and the board-level version start at $771 and $442, respectively.

Storage

■ **Arkeia Software** announced the EdgeFort 500 Series, a federated data protection, all-in-one backup appliance. The EdgeFort 500 Series comes standard with 5TB virtual tape library, disk-to-disk-to-tape management software, and Fibre Channel connectivity. It's also fully integrated with Arkeia's network backup software. Arkeia's federated data management architecture lets you use remote and centralized data protection to make it possible for remote offices and branch offices to back up, restore, and archive critical data. The remote management software enables the management of multiple remote EdgeFort appliances through a Web interface. The EdgeFort 500 Series is expandable to 10TB VTL, and it features an integrated RAID 5 disk to help assure near-line data storage and rapid recovery. Pricing for the 500 Series begins at $28,000.

• • • • •

■ Businesses and consumers alike should take a close look at **NewerTech's** Guardian Maximus external storage unit ($899.99). It offers RAID 1 data protection, mirroring one 10,000rpm hard drive's data on the other. The 300GB Guardian Maximus offers USB 2.0 and FireWire 400/800Mbps connections but not eSATA.

Security June 6, 2008

A Secure Virtual Data Container

QuickVault's JumpVault Gives Mobile Devices Powerful Security Features

Mobile devices are becoming more ubiquitous every day. However, what they gain in convenience they can lose in security. It's common to misplace a mobile device. In either loss or theft, data should be both protected from possible breaches and also able to be disabled remotely.

QuickVault's JumpVault turns nearly any mobile device into a secure, virtual container of information. Size doesn't matter; JumpVault can secure a device with any size internal flash memory. As an added security bonus, the virtual container can be disabled remotely so that the stored data is effectively locked down from any potential breach. Essentially, JumpVault is designed to extend the controlled and secure IT environment to the mobile user.

JumpVault virtual containers are password-protected with built-in 256-bit encryption, remote authentication of devices and users, and meta data logging to keep track of any data movement. When configuring the virtual container, users can include or exclude any files or folders. Supported operating systems include WinXP and Vista, Mac OSes, and Linux. Users can also schedule daily, weekly, or monthly backups and set backup rules. Setup is designed for ease of use and includes drag-and-drop capabilities. JumpVault also automatically compresses files.

QuickVault's servers facilitate a number of functions of JumpVault, including meta data logging and remote data transfer. JumpVault is preconfigured to authenticate with QuickVault's servers, so connection is both simple and secure.

QuickVault JumpVault

Basic Edition: $34.99; Professional Edition: $129.99; 12-month subscription to Remote Security: $60

Provides multilayered security for mobile devices

(404) 735-4443 (volume sales only)

www.jumpvault.com

Networking & VPN June 6, 2008

Keeping Track Of Names, Not Numbers

eTelemetry's Locate 4.1 Gives Administrators Name-Based IP Address Tracking Capabilities

It can be difficult to track users on a network when their only identifying mark is an IP address. Locate 4.1, eTelemetry's network appliance for IP mapping, makes it significantly easier by attaching people's names to IP addresses, MAC addresses, and switch ports.

The appliance makes it easier and faster to locate devices, users, and connections and helps administrators react more proactively to network threats.

Keeping track of ports and addresses by name enables network forensic tracking to account for employee network activity. With configurable reports, administrators can detect rogue Wi-Fi networks so they can react in a timely manner.

Locate lets administrators acquire email, instant messaging, and switch port information from unauthorized users and quickly identify and shut them down. An additional feature named Instant Assist can be leveraged by help desk staff to locate a user's network by name and, with a one-click connection, implement Remote Desktop and Remote Assist.

With Locate 4.1, visibility is possible even without a centralized network, and security and identity management features will still benefit a system without a network operating system.

Locate 4.1 works with any wired or wireless network, features plug-and-play installation, and works from a mirrored port to avoid impacting network performance.

Locate 4.1

$7,495

Provides easy name-based tracking and management of IP addresses on the network

(888) 266-6513

www.etelemetry.com

STORAGE JUNE 6, 2008

Agentless Information Recovery Management

Televaulting 8.0 Provides A Next-Generation Platform For Information Recovery

IT PERSONNEL certainly have their hands full with the escalating amount of information stored on networks, server consolidation, compliance, security, and disaster recovery issues always looming. Legacy backup and recovery technologies don't always have what it takes to ensure organizations can map IT processes, reduce IT costs, retain data long-term, and maintain business continuity. So, organizations are turning to agentless information recovery management platforms, such as Televaulting 8.0 from Asigra.

In addition to providing agentless information recovery management, Televaulting 8.0 offers backup and recovery of VMware ESXi, and its intelligent archiving feature provides policy-based backup life cycle management and long-term data retention, while cutting the costs of hardware storage. The multidirectional data center replication supplants storage-storage replication and supports one-to-one, many-to-one, and many-to-many replications. Organizations will have room to grow in both capacity and performance with DS-Client grid-based scalability. Also, Televaulting 8.0 supports SAP, SharePoint, Oracle, Microsoft SQL, DB2, Exchange, Lotus Notes, GroupWise, and others.

With Televaulting 8.0, IT outsourcers and organizations get integrated information recovery management from the data center to the remote office, along with potential solutions for performance loss, manual deployment, burdensome software and information management, limited cross-platform interoperability, and security problems. The nonintrusive platform behaves as a data recovery services "blade" in the outsourcer's, providing capital and operational cost reductions and allowing for the removal of software agents that have damaging impacts. As the only 64-bit agentless information recovery management platform, Televaulting 8.0 offers a centralized approach to agent-based patchwork solutions.

Asigra Televaulting 8.0

Starts at $14,000

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(416) 736-8111

www.asigra.com

asigra

NETWORKING & VPN MAY 30, 2008

Easy Network Monitoring

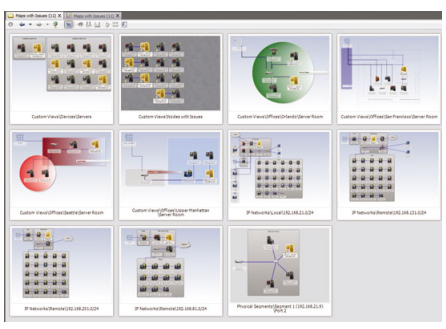
Manage Network Events With AdRem Software's NetCrunch 5

NETWORK MONITORING can be a complicated set of processes. Simple, clear-cut solutions are hard to find, which is why AdRem Software developed NetCrunch 5, a network monitoring solution for SMEs.

NetCrunch 5 boasts the inclusive monitoring of Windows, Linux, NetWare, and SNMP devices. NetCrunch 5 differentiates itself not only by providing such a wide array of monitoring coverage, but also by doing so in an agentless manner.

NetCrunch 5's new features include predefined monitoring policies for major operating systems and applications such as Exchange, SQL Server, Oracle, Insight Manager, IBM Director, and others. NetCrunch 5 is able to monitor an assortment of systems and devices, as it also contains RPC, WMI, SSH, and SNMP monitors and more than 65 built-in network service monitors. A major feature that makes NetCrunch 5 so easy to use is its intuitive user interface. NetCrunch 5 will automatically perform network discovery, a scan of your system that will identify and classify nodes and present them in a graphical map form, making it easier to see where problems occur and making solutions faster and more efficient.

AdRem Software's NetCrunch 5 promises to reduce the cost of IT operations and thus improve company revenue. IT professionals will appreciate lower maintenance requirements and shorter deployment time.



NetCrunch 5 presents data in graphical form, making problems easy to identify and faster to correct.

NetCrunch 5 is designed to run on Windows XP SP2, Vista SP1 (excluding Home), and Windows Server 2003 x32 or x64 and comes in two editions: Premium and Premium XE. The Premium XE edition is intended for a dedicated server, as it is optimized for larger, intensely monitored networks. Both editions include a one-year professional service agreement with annual upgrade protection.

AdRem NetCrunch 5

Premium: starting at $2,595

Premium XE: starting at $7,495

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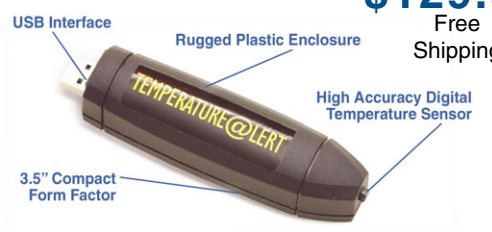

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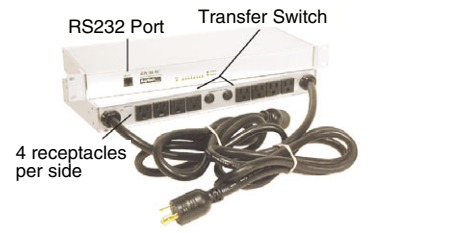

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RPC 14

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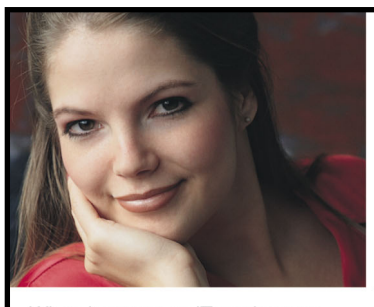

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OPINIONS
INFO-TECH • INSIGHT

Are IT Controls Stifling Innovation?

The ability to innovate and change distinguishes leading organizations. However, business management often believes that IT's standards, processes, and controls inhibit the organization's agility. IT's typical response is that security, reliability, and availability requirements for information systems require tight control. In addition, IT inherently believes that standardization lowers costs.

In essence, then, the common belief is that conformity, loss of end-user or departmental independence, and rigorous control processes are the price organizations must pay for affordable, reliable, and secure IT services. Must we extinguish innovation to serve a control objective? A single IT approach may not be the answer for innovators. In some enterprises, the two worlds of control and innovation each need a different IT approach.

Control & Standardization

It's clear that certain applications in any organization must be tightly controlled with respect to data integrity, controlled accessibility, change management, and reliability of operation. No one can afford incorrect financial reporting or unreliable customer access for order entry. Standardization of systems and infrastructure is important for effective cost management because the more diverse the technology, the more it costs to operate.

The real problem is that IT generally applies controls and standards universally. Many of these controls, while essential in some cases, inhibit innovation and change in others.

Standard PC images and administrative lockdown make it easier for IT to control security and to support the user population. However, they make it difficult for individuals or specialized groups to deploy technology that can help them be more effective or efficient. A $500 software purchase with a 10-minute installation process may become, due to IT involvement, a $5,000 labor investment and take two months.

Innovation, Not Anarchy

Clearly, some enterprises haven't achieved adequate controls. Security is weak. Reliability is poor. Changes to applications are not controlled, leading to errors or downtime. The first step for them is to establish controls. Demand for agility from the business is no excuse for poor controls where they are needed.

On the other hand, some organizations have established excessive IT controls. There are few security risks. Access to data is well-controlled. Changes are not implemented without extensive testing. But exceptions get bogged down in approval processes, and the general process for deploying change carries significant cost and time overheads.

One must occasionally recognize excessive controls and loosen them. However, the answer to the conflict between control and innovation is not generally to eliminate controls that have served the organization well. The answer may well lie in separating the "controlled" world from the "innovative" world and reducing restrictions and standardization and rigid processes in the "innovative" world. Organizations that have stifled innovation through excessive control may justify a separate IT infrastructure, policies, processes, and service standards. This "innovative" environment is focused on freedom of action by business specialists with good IT competence. Users of the "innovative" service will have fewer controls on application software and technology standards, allowing them to make quick and efficient use of applications suited to their specific needs. Pilot deployments of shared systems can be implemented quickly, meeting urgent needs without the delays inherent in the existing process.

Not For Everyone

The road to a dual-world environment is difficult. It lies outside the experience and tendency of most IT professionals, who prefer control and predictability and standardization. It adds cost as the diversity of applications and technologies grows, and support becomes more expensive. It is difficult to manage, as the user bias will be to classify everything as "innovation" because it's easier for them.

And, in reality, not all organizations encourage or can afford broad innovation. For these, the discussion is moot. Control and standardization is the answer.

But those enterprises that value and encourage innovation but must deal with a tightly controlled IT environment have a challenge. They can live with these constraints or loosen controls, neither of which is a road to success. Or they can begin to develop an IT framework that enables independent or experimental approaches and is parallel to the traditional controlled environment. The successful and innovative enterprise going forward could be a dual IT organization. It will operate a controlled, standardized IT environment for its regular, stable services. And, in parallel, it will support an infrastructure that allows selected users to manage their own environment and their own applications. At some time, some of the applications or technologies will transition from experimental to essential, and IT will have to move them from the "innovative" to the "controlled" environment. Innovation can coexist with control. We just have to recognize their distinctive identities. P

Send your comments to infotech@processor.com

ANDY WOYZBUN

AUTHOR *Andy Woyzbun has more than 35 years of experience in extending and supporting IT in government, consulting, computer services, financial services, and telecommunications. Before joining Info-Tech as lead analyst, Woyzbun spent more than 10 years as CIO with several organizations. Andy has an engineering degree and master's degrees in computer science and in business administration.*

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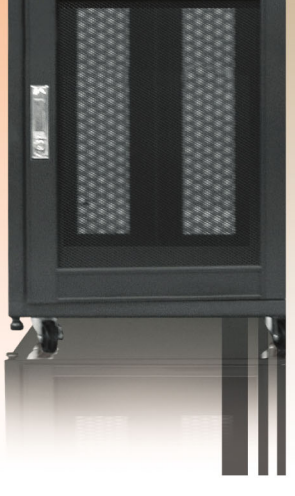

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Improved Email Management

A Tightened Grip On Email Keeps Your Information Where It Belongs

by Robyn Weisman

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EMAIL HAS BECOME the predominant means of communication at organizations of all sizes. Yet there is something about email that makes it seem extraordinarily fleeting, says Joel Mohrman, senior litigator at law firm McGlinchey Stafford (www.mcglinchey.com).

"We hit the DELETE button, and it goes away, but we know that electronic information in some ways is more persistent than hard copies. It gets copied over and over again," Mohrman says. And because it can be propagated in a variety of ways, you never know where it might be lurking. It could be on someone's PDA, in the email archive of one of your customers—or à la Murphy's Law, nowhere to be found, just when you need it most to prove your case.

Proper email management is essential to avoid potential financial and legal troubles, yet according to a recent survey conducted by the AIIM's (Association for Information and Image Management's) Market Intelligence Group, only 49% of businesses can say with confidence that their electronic documents are accessible and accurate. Litigation is expensive on any level because of the discovery process; if you can't keep track of your email or access it with relative ease, you risk your business going kaput.

Here are some things to keep in mind when mapping out or revamping your email management strategy.

Making Policy

First off, email at work belongs to the company, and anyone who thinks he or she has privacy rights with email is flat out wrong, says Mohrman. If you don't have explicit policy that states this fact, you need to put it in writing so that everyone—including your CEO—is on the same page.

It isn't enough, however, to set policy and then assume your employees will automatically understand it, let alone follow it. Dave Campbell, senior product marketing manager at Symantec (www.symantec.com), says you must make your employees cognizant of the way they're using email, educate them on their responsibilities around email, and then align them with your company's policies.

"You don't want users sending business emails to their personal email accounts on Gmail, Yahoo!, or Hotmail; creating rogue PST files; or using email for intensely personal matters," Campbell says. "Employees at all levels need to understand what the company's retention policy is and [that] these emails are records and may be used the same way a purchase order or financial statement is used as business-critical information."

Document Retention & Archival

Examine your document retention policies to see how long your emails are being kept and whether they are readily accessible. If you don't keep your email but keep backup tapes, for example, a court may require you to produce these backup tapes and restore the subpoenaed emails to a server, which may entail buying new servers to do so, says Mohrman.

"It's not to say you can't dump stuff. As long as you have a reasonable basis and system, dumping is not a problem," Mohrman says. "It gets to be a problem if you start dumping stuff after you've reasonably known a lawsuit is in the offing."

The technical term for dumping evidence when your company gets into a lawsuit or knows one is coming is "spoliation." According to Mohrman, if a court holds you to spoliation, it can enter a summary judgment or levy monetary sanctions against your company.

Symantec's Campbell recommends getting an archival solution and integrating it with your retention policy so you can stop

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Automation Is Your Friend

Dave Campbell, senior product marketing manager at Symantec (www.symantec.com), says that automation is the key to addressing business, IT, and legal challenges around email management.

"Employees don't have the time or expertise to manage their inboxes and decide which emails to keep or delete based on the sheer volume they create and receive on a daily basis," Campbell says. "That's what's leading companies to store too much information, not regularly deleting email records when appropriate, and therefore makes it very difficult and time-consuming to find specific records for business or legal reasons."

Archival Eliminates Need For Quotas

Although mailbox quotas frequently are needed to keep your mail server from running out of space, you can run into problems when you make your employees responsible for deciding which emails to keep and which to delete, says David Vella, director of product management at GFI (www.gfi.com).

Implementing an email archival solution, then, will eliminate any mailbox quota issues because employees will know that all their corporate email is being archived and they can access it at any time, Vella points out.

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Little Back Doors

Orphaned Accounts Put Your Network At Risk

by Sandra Kay Miller

• • •

When employees leave the company, what happens to their user accounts? Chances are they become orphans. According to a recent survey conducted by Symark (www.symark.com) of more than 850 security, IT, HR, and C-level executives across all industries, 42% of companies have no idea how many orphaned accounts exist within their organization, and 30% say they have no procedure in place to locate orphaned accounts. So what's the problem?

"Well, they're little back doors, that's the problem," explains Jeff Nielsen, senior product manager at Symark.

The truth is that every account within an organization covers some aspect of valued data. "If you think about the system and database administrators, certainly they have the keys to the kingdom. But even people in accounting have access to things like customer lists and how much money they've paid for products and maintenance—that has value to a competitor," says Nielsen.

Have a policy in place that defines the procedure and timeline for the deactivation of user accounts when an employee leaves the organization.

Sally Hudson, research director for IDC's Security Products and Services group, which focuses on IAM (identity and access management) products, has noticed that while companies have invested in identity provisioning and management, they often neglect the deprovisioning aspect.

Of those surveyed, 12% admitted to leaving orphaned accounts open longer than a month. "Your typical hacker that's going to get in and steal credit card numbers or other information is going to get his business done in a day or two so he doesn't expose himself to being caught. If you leave accounts open for longer than a few days, someone can easily steal your data and you'll never know it happened," says Nielsen.

Shut The Door

Anytime an employee leaves an organization, it's important that whoever is responsible for user account administration be notified. Even when employees change roles within their organization, orphaned accounts can occur. Stuart McIrvine, director of emerging markets at IBM Tivoli Software (www.ibm.com/tivoli), notes, "If an employee moves out of the payroll department, they should no longer have the authorization to cut checks since it is no longer within the scope of their job."

Most companies are thorough enough about having a process that says when a person leaves, HR is supposed to inform IT that this person has left, but that doesn't always happen. Often, poor communication and lack of procedural policy result in orphaned accounts remaining active. In other cases, it's the age-old problem of too much to do and not enough time.

"A lot of times, the people in IT will diligently get started on removing these accounts, but something demands their attention and they never get back to it. A lot of accounts just end up sitting out there just because, in the fog of business, no one removed them," Nielsen points out.

Identifying Orphans

To identify orphaned accounts, Nielsen recommends starting with a good audit if you don't have a good system in place already, such as having Human Resources notify IT prior to or upon the immediate exit of an employee. An audit should map active accounts to current employees or contractors.

With a completed audit, enable a well-defined process for those responsible for employee status, typically Human Resources. First, start with an audit to make sure active accounts map to current employees or contractors. Next, set up a tight process for whoever owns employee status. Include on the checklist all the principal system administrators who require notification. Nielsen advocates having a single person or group in IT tasked with verifying that all account access has been disabled. "This is much more effective than having the email chain out to the multiple administrators," says Nielsen. While this method is more time-consuming than a blanket email notification, it's more secure and better than having data needlessly leaking from your organization.

Another method Nielsen suggests for alleviating orphaned accounts is to centralize accounts around directories. "Instead of having six different applications and 15 different operating systems that carry their own set of user accounts, integrate them all into a directory such as Active Directory or an LDAP directory of your choice so that when a person leaves, you can go in and delete a single user account, and all of his access gets terminated across the board. Then you have a much better chance of the system actually working on a timely basis," Nielsen says.

Reducing Orphaned Accounts

- Have a policy in place that defines the procedure and timeline for the deactivation of user accounts when an employee leaves the organization.
- Aggregate account access under directory services such as LDAP or Active Directory.
- Regularly audit accounts and verify they map back to active employees or contractors.

While line-of-business and network access are obvious targets for preventing orphaned accounts, Nielsen adds that organizations should have a checklist of all types of accounts that pose risks, including email and VPN access.

Regulatory Concerns

There are more concerns for orphaned accounts than just security. Regulatory compliance laws, such as the PCI DSS (Payment Card Industry Data Security Standard), specify that each user must have a unique user account to provide an audit trail. "If you have an account that belonged to a former co-worker that still contains spreadsheets and you log in to that account, you're breaking the rule," says Nielsen. Similarly with Sarbox, proof is required for control over organizational financial systems to ensure the validity of data. "If you can't audit who goes into those systems, especially on [a] privilege basis such as people logging in as root, then you can't defend the fact that you have those systems under control." P

Survey Says

Symark (www.symark.com) recently conducted a survey of more than 850 security, IT, HR, and C-level executives across all industries about orphaned accounts. Here is what they found.

When an employee or contractor leaves the company, their account is terminated in . . .

39%	Immediately or within hours
23%	One to three days
8%	Three to seven days
9%	One to two weeks
12%	Longer than one month
9%	Didn't know

Does your organization have a procedure for locating orphaned accounts?

23%	Contacted by Human Resources
26%	Spot audits
22%	Password change policy
30%	No current procedure in place

Has a current or former employee ever used an orphaned account—before it was terminated—to access information?

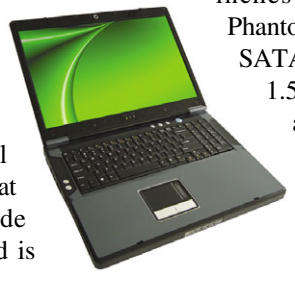
4%	Yes, just once
6%	Yes, two to five times
1%	Yes, six to 10 times
3%	Yes, more than 10 times
47%	No
38%	We have no way of knowing for sure

Clients May 30, 2008

Server Power, Laptop Portability

Eurocom's D90xC Phantom-X Mobile Server Provides Powerful Computing On The Go

The need for powerful, server-caliber computing in settings other than a typical office is a large and crucial one. Eurocom addresses this market with its D90xC Phantom-X Mobile Server, a powerful PC in a laptop form factor that weighs just 12 pounds.



The D90xC Phantom-X is a 64-bit system that operates on Intel quad-core Xeon processors running at 2.83GHz with 1,333MHz frontside bus and 12MB of L2 cache. Speed is further facilitated by up to 8GB of DDR2-800 memory.

Although measuring 11.9 x 15.8 x 2.05 inches (HxWxD), the D90xC Phantom-X supports up to three SATA-300 hard drives for up to 1.5TB of storage. Users can also choose between RAID 0, RAID 1, or RAID 5 configurations.

Other features include a 17-inch display, a one-hour backup battery in the event of a power failure, and a rewriteable Blu-ray drive. The keyboard is a full 102-key desktop-type board with a separate numeric keypad. Wireless options include built-in 802.11a/g/n WLAN, as well as Bluetooth.

The D90xC Phantom-X also features a number of I/O ports, including a Gigabit Ethernet LAN with an optional second Gigabit Ethernet port via a PC Express slot. The computer also features four USB 2.0 ports, FireWire, serial and parallel ports, and CRT and DVI-D ports to power up to two additional external displays.

The D90xC Servers are customizable, and the hard drives, memory, optical drives, processors, and graphics are upgradeable.

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Remote Tech Support Services

Could Hiring Outside Firefighters Help Your SME?

by Elizabeth Millard

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In addition to implementing new hardware, doing long-range planning, and evaluating security and storage strategies, most IT departments also handle the day-to-day firefighting that comes with technology usage.

Printers go down, email sputters, documents get lost, and desktops suddenly become unresponsive: Such are the mundane annoyances that can keep tech staff members scrambling just to do damage control, leaving less time for larger, more comprehensive tasks that also need to be handled.

For some small to midsized enterprises, these types of everyday problems are being handled not by internal resources but by outside firms that specialize in tech support. Although these services may not be appropriate for every SME, adding a dash of outsourcing into the support mix could free up time and prevent the need to add to in-house head count.

Service Station

Remote third-party support services often have a range of options available to augment an IT strategy, including review of antispyware definitions and Windows Vista training (see the "Support Mix" sidebar for more information).

They work by delivering service over the Internet, effectively taking control of a desktop machine remotely in order to install software, do diagnostic tests, or walk a user through a series of steps over the phone.

Like other types of outsourced services, such as data storage, rates are usually determined based on the amount of work that's required, and many companies choose to buy time rather than be charged per incident. For example, an SME might opt for a per-minute plan or buy 15-minute blocks, notes Fred King, vice president of sales and marketing at remote tech support firm PlumChoice (www.plumchoice.com).

Also available are special rates for specific tasks, such as desktop optimization. "These type[s] of packages are popular because no matter how long a PC tune-up takes, for instance, it will be the same price."

Benefits & Drawbacks

One advantage to outside support services is that many offer around-the-clock service, so even if an employee is traveling or working from home on the weekend, he can tap into tech support without requiring internal staff to be "on call."

"At many home offices in particular, they tend to have a big problem with spyware and malware infection," says King. "If you think about how expensive it would be to send someone out to take care of that, it becomes cost-prohibitive for IT staff to be making those kind[s] of house calls."

For companies that have remote tech support at the main office, these types of service firms can operate without infringing on data security controls. "What we're doing is no different than someone walking up to the machine and working on it," says Chip Reaves of Computer Troubleshooters (www.comptroub.com). "As long as there isn't client data sitting on the desktop, you won't be exposed."

But challenges can come when there are problems with a network, particularly if connections falter. Because these firms depend on being able to gain control of a desktop remotely, there's little they can do if there's no way to use an Internet connection to access a particular machine.

But even in these cases, they can be of some help if they employ local technicians that can do site visits or have an extensive network of support personnel in the form of independent contractors.

When To Outsource

Although outside support services can be a boon, they don't make sense for every SME. For example, if a company has significant security controls that have to be maintained and severely limits access from outside the network, setting up remote support will be a challenge.

Since these services need to have control of an employee's desktop in order to diagnose and fix a problem or to install upgrades or security patches, making them jump through multiple access levels could be more of a headache than an advantage.

These firms tend to work best when remote support is needed for a branch office or a home office, where IT employees would have to travel to help when problems occur.

"An aspect of support that IT really likes is that we can give them a portal to computers at home offices or branch offices, which they may not have had before," says Reaves. "Then, not only can we do support there, but they can, too."

One consideration when embarking on an arrangement with one of these services is to inform employees about what type of support will be available but also to make clear what isn't part of the agreement.

Support Mix

Some of the types of services offered from remote tech support include:

- Installation of security software, applications, and patches
- Support for a wide variety of hardware, from servers to digital cameras
- Monitoring of spyware and malware
- Windows Vista training
- PC tune-ups and diagnostics
- Wireless network setup
- Data backup

Because many of these firms also have consumer clients, they offer support for nonbusiness-related tasks, such as organizing a digital music library, assisting with digital video editing, or fixing MP3 issues. Stating upfront what's considered business and what isn't will prevent support time being used up for personal support questions.

In general, if an SME is finding that far too much IT time is being spent in fighting the kind of daily fires that come with spyware, printers, software installation, and other tasks, a remote tech support service can help to keep a company running and give IT time to focus on other tasks. P

Finding The Right Support Service

When shopping for a remote tech support company, here are some questions to ask to make sure it is the right fit for your SME.

- What kind of reports will be generated based on its support, and how often will these reports be delivered to IT?
- Does it charge by an hourly rate or per incident? What type of payment structure does it find works with a company of your size?
- What type of access will it need?
- Will personnel be available locally if an onsite fix is needed?
- Can the support mix be changed as the relationship evolves?
- Does it support all the types of hardware and software currently being used at the SME? What about applications developed in-house?
- What kind of insurance or guarantees does it provide if its actions result in a security breach or downtime?
- Can it provide references not just for current customers but also past clients?

Improved Email Management

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wasting money on storing redundant information and reduce the risks and time spent managing the information.

David Vella, director of product management at security solutions provider GFI (www.gfi.com), says that email archiving enables employees, either through a Web browser or their Outlook client, to access all their old and deleted emails to search for particular conversations and to restore them in seconds. Email archiving can save you and your staff from having to slog through backups to find emails when an employee can't vouch for certain when they were sent or received.

Consider Encryption

For his part, David Thompson, product manager at information encryption solutions provider Voltage Security (www.voltage.com), says that if you encrypt email files, you do not have to worry about where that email ends up. "Data is ultimately what is valuable, and we want to know how it's accessed and that it can't be accessed by those who shouldn't. [Encryption] moves with the data itself," Thompson says.

Thompson recommends that the technology you deploy for email encryption does not interfere with other applications that interface with your email, including antivirus scanning and archiving applications. Also, make sure you find a solution with centralized key management so that you don't end up in a situation where you cannot decrypt an email because you can't recover the correct key, he says. P

SIX QUICK TIPS

Improve Email Archiving Without Breaking The Bank

Retention Policies Play A Pivotal Role

by Drew Robb

• • •

Email archiving is becoming law in more and more countries and states. Most recently, Canada mandated the technology for financial services firms by the end of the year. Such regulations are placing a financial burden on many small to mid-sized enterprises.

"Many firms have raised concerns about the overwhelming costs of physical storage and difficulties in developing a suitable email archival and retrieval system," says Kieron Dowling, president and CEO of Jatheon Technologies (www.jatheon.com).

There are ways to improve archiving, though, without it costing an arm and a leg.

Backup Is Not Enough

The first thing to cover is what not to do. With budgets tight, some firms try to avoid the cost of archiving hardware and software by reasoning that their backup tapes can also serve as a makeshift archive. However, backing up copies of email servers will not meet most record-keeping requirements. In fact, backup technologies actually can't do email archiving.

"Backup tapes don't archive all email messages; if a user sends an email to a co-worker and minutes later both users delete all traces of that email, the backup tape will not capture that email," says Dowling. "Backup tapes don't maintain copies of emails exchanged between backups or retain copies of emails deleted by users after the backup is replaced with a newer one."

To make matters worse, backup tapes can even slow down the retrieval process. Many companies have already experienced the nightmare of scrambling through hundreds of old backup tapes to find specific emails. As they lack a search capability, backup tapes require IT staff to manually look for requested emails. And from a legal perspective, the integrity of the emails retrieved cannot be confirmed; that is, if a user receives an email and subsequently edits and resaves it, overwriting the original, a backup tape would not have a copy of the original.

"An email archive, on the other hand, stores, indexes, retrieves, and monitors all inbound, outbound, and internal email messages and file attachments in real time," Dowling notes. "It can ensure that email and attachments have not been altered. An email archive would retain a copy of the user-deleted email, as well as the original and modified versions of the user-edited email. And an email archive's index expedites email retrieval."

Set Policy Correctly

Archiving hardware or software won't do the job alone. It has to be backed up by the right policy in order to gain real value.

"The first step to improving email archiving is to establish retention policies," says Moosa Matariyeh, a storage specialist at CDW.

Policy must be set wisely for retention of emails. It must incorporate the intricacies of the law, including federal law, the various states' laws, and other countries' laws, all of which may demand different retention periods for different file types and documents.

Such policy, however, cannot be developed in an ivory tower or by IT alone, or by some other unit. Ideally, it should be developed with input throughout the organization. The result will be more broadly applicable and will facilitate more internal compliance.

"Policy for how email will be used and retained should be developed with input from across the organization—IT, legal, HR, compliance, customer relations, and administrative departments," says Dowling. "Make sure international divisions of the company are included, too."

Communicate Archiving Policy & Usage

There should be one policy for retention and another for email usage throughout the company, and those policies have to be communicated well for employees to observe them. Managers should notify all employees, for example, not just through email but through training and department meetings.

Such training and orientation makes several things clear to employees. They will begin to understand that loose talk in email could come back to bite them. Make sure they know what the various penalties are.

"Everyone in the company should understand both appropriate and inappropriate use of email and that violating usage guidelines is a punishable offense," notes Dowling. "Employees should also know that copies of everything they send are being archived; this knowledge alone often results in fewer instances of inappropriate messaging."

Simplify Policy

Some companies bog down their archiving systems with too many do's and don'ts. For instance, one regulation says to keep File Type A for two years, File Type B for five years, and File Type C for seven years, and after awhile, that can become impractical or can be extremely costly to implement, especially for SMEs.

Dean Richardson, vice president of ArcMail Technology (www.arcmail.com), says the best way to improve email archiving is to keep it simple. Having different policies for different users or departments does not address the data content, which is where the retention policies almost always apply. "Archive everything possible and use a single retention period," he says. "You never know which email message will be critical years down the road when you need it." P

Best ROI:

Centralize Archiving

Email files can be strewn throughout the enterprise. The most common location is in Outlook PST files, which reside in the user's machine. So hooking up an archiving system to an email server, for example, may not capture all the messages, and that can come back to haunt you when a lawyer asks for every email from a certain period. That can lead to hundreds of lost hours trying to dig everything up.

"Import your existing email and all PST files you can get your hands on into your archive system," says Dean Richardson, vice president of ArcMail Technology (www.arcmail.com). "These are all discoverable, and importing them into your archive ahead of time (at your leisure) can help you avoid expensive discoveries from backup tapes—or even worse, desktops—down the road."

Easiest Tip:

User-Friendly Archives

Give your users access to their archives. This has several benefits:

1. They can search their own email and find what they're looking for in seconds.
2. They don't need to keep "underground archives" or PST files on their desktops.
3. You can reduce the amount of email you store on the mail server by setting a time-based retention policy on the mail server and telling the users to look to the archive for email older than a certain number of years.
4. If users are using the archive system, they are constantly reminded it is there, and they will tend not to send emails with content they wouldn't want the boss to see, which can dramatically reduce liability.

BONUS TIPS

■ **Identify needs.** Improving email archiving is all about identifying needs. What exactly are you trying to accomplish? Moosa Matariyeh, a storage specialist at CDW, suggests that there are many different reasons for establishing an archive. These include meeting legal requirements, providing granular searchability for litigation, or simply reducing the size of the email server data store. Work out what you are trying to do and focus on that. Not everyone needs state-of-the-art technology.

■ **Project growth.** Before buying any email archiving system, make sure you take into account your expectations for the growth of projects as data is constantly increasing. With everything out on the table, surprises will be limited, and you won't end up with an email archive that doesn't scale.

Regulating Electronic Communications

Archive Messages With Akonix's L7 Enterprise For The BlackBerry Enterprise Solution

As professionals use electronic communications more and more, organizations must look for ways to supervise and archive this type of communication to prevent fines and legal sanctions.

For organizations looking to archive and monitor all forms of electronic communications, Akonix has introduced the L7 Enterprise for the BlackBerry Enterprise Solution.

As a new addition to the Akonix UPM (Unified Policy Management) platform, L7 Enterprise for BlackBerry archives SMS, PIN-to-PIN text messaging, instant messaging, and email, making them searchable, retrievable, and auditable. They can be sorted by employee name, group, or other directory attribute. L7 Enterprise can also offer security, policy management, and content filtering in addition to the archiving, with support for Microsoft Office Communicator Mobile, IBM Lotus Sametime Mobile, and MindAlign Mobile.

The L7 Enterprise provides thorough electronic message storage by integrating with LDAP directories, such as BlackBerry Enterprise Server, Microsoft Active Directory, and email archive platforms, such as EMC EmailXtender, HP Integrated Archive Platform, and Symantec Enterprise Vault. L7 Enterprise provides multiple real-time communications from a single console and the ability to apply and enforce policy through other L7 Enterprise modules available for enterprise and public IM, online conferencing, server-based fax, and VoIP. It will be available as an add-on module for Akonix's A1000 and A6000 appliances or as a Windows Server software module.

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Reclaiming Resources

Diskeeper Aims To Defrag Storage & Boost Performance With Its Offerings

by Sue Hildreth

• • •

REMEMBER THE DEFRAGMENTATION utility that you ran once a month or so on your IBM PC to clean up its 100MB hard drive? Do you still have a defragger on your PC today? Or use it? Increasingly, PCs are not only shipped with defrag utilities, but the corporate data center staff is making sure they are put to use.

"90% of the performance problems are due to fragmentation issues," says Craig Jensen, CEO of Diskeeper (www.diskeeper.com), which makes automated defragmentation software for both corporate and home computer users.

In fact, a survey released by Diskeeper in June polled 179 network administrators on what software they felt was important to have on their servers. Of those polled, 45% named defragmentation software, with 61% of those citing performance as the key benefit of defragmentation.

Fighting Fragmentation

Fragmentation occurs when data is stored in various pieces that are scattered around the available storage space rather than together in one contiguous block. When new files are stored, the computer distributes them across the available chunks of free space, and when a file is spread out over several locations, it takes longer to read and write. Besides slow performance, fragmentation can also result in longer boot times, crashes, and freezes.

"Users often blame the software or hardware, but often it's the result of fragmentation," says Jensen, who founded Diskeeper Corp. in 1981, originally under the name Executive Software. Its first defragmentation product helped land the company on *Inc.* magazine's list of 500 Fastest-Growing Privately Held Companies in America for four years in a row. Originally designed for Digital Equipment's VAX mainframe computers, it later moved to the Windows platform. Diskeeper then created a version just for Microsoft, which is in-cluded in most versions of Windows.

Defragmentation software rearranges stored data into more contiguous blocks, reducing fragmentation and also freeing up more storage space. Defragmentation utilities have been around for decades but have gradually lost popularity as computer networks have become larger and storage cheaper. Performance problems were often dealt with by adding more disk capacity.

"Data center managers have not always treated fragmentation as a major problem," says Jensen. But he believes that corporate America is starting to take defragmentation seriously again.

Changing IT Trends Drive Changes In Defragmentation

Defragmentation is actually more critical today because of the heavier overhead that computer systems carry due to greater storage capacity, the pervasive use of video and graphics, and the increased use of antivirus and antispam software, says Jensen.

IT administrators must also deal with greater numbers of desktops, often remotely, which they did not have to worry about in the early days of defragmentation. Back in the 1980s and early '90s, it was possible to manually defrag individual desktops. Today's IT manager rarely has time to manually defrag dozens or hundreds of desktops scattered around the office or over the network.

Jensen says that and other changes in IT usage have also driven change in defragmentation software. For example, to accommodate the growth of remote PCs, Diskeeper 2008 has added administrative features so that an IT manager can configure and push Diskeeper out to networked PCs, as well as monitor them via a central desktop. To cope with the ever-increasing size of storage drives, it also now has a Terabyte Volume Engine for handling high-capacity drives more efficiently.

Virtualization is also exacerbating fragmentation: Because virtualization decouples the software logic from the physical hardware, fragmentation can occur in the physical drive and in the virtual storage, says Jensen.

"Some people think that because a system is virtualized, they can throw out all of the best practices of defragmentation," says Jensen. "But a virtualized system suffers from three times the fragmentation. There's fragmentation of the host [physical] system, and fragmentation of the guest, and fragmentation of the mapping of the relationship between the virtual disk and physical disk."

Yet another issue is the advent of solid-state disks, which don't have any moving mechanical parts. While presumed to be free from fragmentation worries, Jensen says they have actually proven to be more prone to fragmentation problems.

"Fragmentation has a bigger impact on a solid-state drive than on a rotating-disk drive. In one SSD we tested, we rated 100,000 free space fragments accumulated in less than eight weeks," he says.

It's the huge increase in storage media itself that has presented the greatest challenge, however.

"Storage just keeps growing and growing in size, so it's been a big challenge keeping up with this explosion in capacity," says Jensen. "Our R&D areas have to stay on top of how you defragment a multiterabyte drive—and defragment that drive in less than a production day."

Changing Perceptions

Many IT managers have been reluctant to invest in defragging software because of its image as a time-consuming utility that takes over the computer. Because disks and servers have grown in size, thus requiring even more time to defragment, traditional defragging software often does have to run after hours. To keep up with the growth in storage and the faster pace of IT operations, Diskeeper has added InvisiTasking, a proprietary technology aimed at making defragmentation more invisible to the user.

InvisiTasking carefully schedules the sharing of computer resources between Diskeeper and other applications, enabling the Diskeeper defragmenter to operate without interrupting other programs.

"Normally, software programs share computer time on a round-robin basis, with each process getting the whole machine for a few milliseconds. But often, [a] program only needs the CPU but not the memory, or the disk but not the CPU. So we came up with a way to schedule programs that just need disk resources along with those that don't need disk resources," he explains. "So, Diskeeper can run without anyone being able to tell that it's running."

The InvisiTasking feature will be included in a future version of the company's Undelete file recovery product, as well, and Jensen says he's in the process of talking to hardware vendors about possible OEM deals.

"That's probably the most exciting of the products we have," says Jensen, pointing to backup processes and antivirus scanning as two applications that could benefit greatly from InvisiTasking. "Some backups are running 20 hours or longer. By reducing the overhead on that, a backup can be done during the production day. InvisiTasking is definitely [something] we will be focusing on more in the future." P

Genuine OS Savings

Microsoft Authorized Refurbisher Program Offers Discounted Windows XP Licensing

by Joseph Pasquini

AS THE COST OF OPERATING a data center continues to rise and software and equipment become more and more expensive, refurbished PCs are an ever more attractive option for a growing number of small and midsized enterprises looking to cut costs. To help ensure compliance with licensing requirements, Microsoft has launched its MAR (Microsoft Authorized Refurbisher) program, which is tailored to the needs of large refurbishers looking to preinstall Windows XP on refurbished PCs intended for sale to price-sensitive commercial buyers.

We recently had the opportunity to ask Bradley Hopkinson, Microsoft's Director of Genuine Windows, about MAR and what the program can offer to SMEs. Hopkinson, who has been involved in the IT industry in South Africa and the Middle East for the past 12 years, possesses a background in finance coupled with a deep understanding of emerging markets.

■ What are the biggest IT-related issues facing today's small to midsized enterprise?

Hopkinson says that many small businesses face a slew of challenges related to cash, staffing, and similar resource constraints—challenges he collectively refers to as "pain points." According to Hopkinson, some of the pain points SMEs need to resolve include how to make due with less, how to grow and maintain the customer pipeline, how to effectively manage finances, how to enable a more efficient and productive work force, and how to make their business more environmentally friendly.

"The MAR program speaks directly to some of the challenges faced by SMBs by providing cost-effective licenses for genuine Windows XP software on refurbished computers," says Hopkinson. "By purchasing PCs from Microsoft Authorized Refurbisher partners, small businesses can save money, time, and resources while knowing that the software on the PC is genuine and safe."

■ What should *Processor* readers know about your program's products?

MAR offers access to proprietary tools designed to streamline the legal deployment of Windows XP on refurbished PCs. In addition, end users benefit from access to updates and associated downloads.

PCs that have Windows XP preinstalled include a new Certificate of Authenticity affixed to the PC, in addition to a Recovery Media Pack. Hopkinson adds that partner refurbishers are required to provide adequate procedures for data wiping and reporting.

In order to qualify to be a Microsoft Authorized Refurbisher partner, refurbishers must possess a track record of supplying an average of 5,000 refurbished PCs per month for the preceding 12 months. The partner must also conform to stringent data wiping and reporting standards regarding all hard drives being recycled through the program. Partners are also required to demonstrate a level of technical competence and meet standards for environmental compliance. MAR is open to OEM refurbishers headquartered worldwide; refurbishers headquartered in the U.S. and Canada can also participate if they meet eligibility requirements.

■ What makes your company unique?

"Since its conception, Microsoft has been committed to supporting the needs of small businesses with innovative technology and resources to help drive customer success," says Hopkinson. "Microsoft invests nearly $8 billion in R&D each year to drive innovation and industry breakthroughs in computer science and software and is well-positioned to continue its leadership position in software for businesses, governments, academic institutions, and consumers."

Hopkinson adds that MAR helps to protect the health of both the channel and the partner ecosystem by both providing market differentiation and adding increased legitimacy. "Previously, refurbished PCs were likely to be shipped without an operating system installed and often ended up with nongenuine copies of Windows operating systems," says Hopkinson. "Microsoft developed the program at the request of partners, who sought a way to cost-effectively deliver genuine licenses, distinguish their business practices, and certify the validity of their offerings."

NETWORKING & VPN

MAY 30, 2008

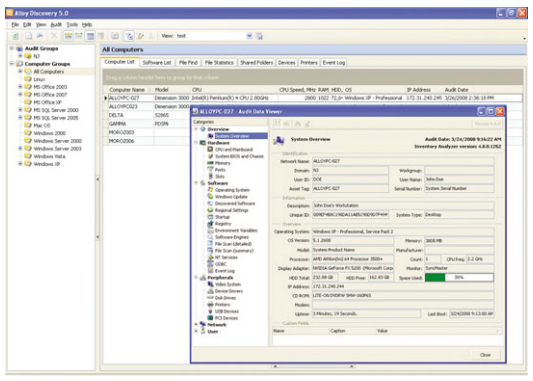
Audit Your Computer Inventory

Alloy Discovery Provides All The Necessary Tools

THE INVENTORY of computer hardware and software can be easily overlooked. Alloy Discovery from Alloy Software is a network inventory solution to help SMEs gain tight control over their entire computer inventory through a combination of audit methods that include an agentless on-demand audit, login-script, scheduled task, and the portable audit for non-networked computers.

Alloy Discovery can configure, deploy, and run inventory audits, as well as help analyze the audit results. For flexible deployment, the software offers multiple configuration options, including single- and multi-domain networks; workgroup networks; remote (WAN) sites and isolated networks; and standalone and non-networked computers. Alloy Discovery lets you audit computers on an ongoing basis.

To help maintain an up-to-date inventory, Alloy Discovery includes an automated archive process called "Pruning." This process allows you to define a schedule for the removal of obsolete audit snapshots and determine the file storage path for archived records. The system will then automatically remove obsolete audit snapshots from the Inventory Repository.



With flexible data filtering and grouping, Alloy Discovery lets you sift through data using specific criteria.

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SECURITY

MAY 23, 2008

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Because all of the Enterprise UTM security applications are integrated at the architectural level, organizations realize better performance and service at a lower cost of ownership—up to 60% over standalone products. Application modules can be deployed as part of a complete security infrastructure or can be added incrementally, as business and compliance requirements evolve.

The All-n-One Security module for Enterprise UTM comes in four options (with firewall, VPN, antivirus, antispam, content filter, IP reputation, and IPS included), with pricing starting at $7,500 for an ASM core module. Custom configurations for the Enterprise UTM++ solution are designed and priced based on an organization's unique network requirements. Pricing for turnkey managed services starts as low as $1,000 per month.

Global DataGuard's approach to supporting organizations in improving their compliance posture includes aspects such as behavioral analysis and correlation, security monitoring, vulnerability management, network access management/monitoring, assessment, training, project management, policies and procedures, and regulatory compliance audits. It provides a risk-based methodology, regular reviews of security controls, full life cycle device management, and audits and assessments for workforce and training policies.

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NETWORKING & VPN

MAY 23, 2008

Mobile Management

Control Wireless Networks With AirWave Wireless Management Suite 6

View and control all aspects of your wireless network with the AirWave Wireless Management Suite 6.

THE MOBILE workforce is growing as wireless technologies emerge and evolve. While this is great for the success of organizations, it can be a burden to IT support teams. But with a program that gives you visibility and transparency from a single console, such as the AirWave Wireless Management Suite 6, organizations can configure and manage an entire wireless network without additional costs.

AirWave Wireless Management Suite 6 from AirWave, a division of Aruba Networks, can help organizations migrate to 802.11n technology without discarding legacy infrastructure. The application also features a new Help Desk module that integrates with existing service desk solutions to provide IT with automated diagnostics and real-time monitoring for more efficient resolution of end-user issues.

Access points, routers, switches, authentication servers, and management servers are visible across wired and wireless infrastructures. This program provides comprehensive reports and centralized control of tens of thousands of wireless devices.

The AirWave Management platform provides real-time monitoring of wireless users and devices, as well as multivendor support. VisualRF software features direct CAD and bulk floor plan import to make console views more user-friendly, along with visual display of alerts and error conditions. For enhanced security, the platform includes RAPIDS rogue AP detection software. The AirWave Master Console offers scalable centralized configuration and detailed reports of the network's performance, groups, locations, and individual devices.

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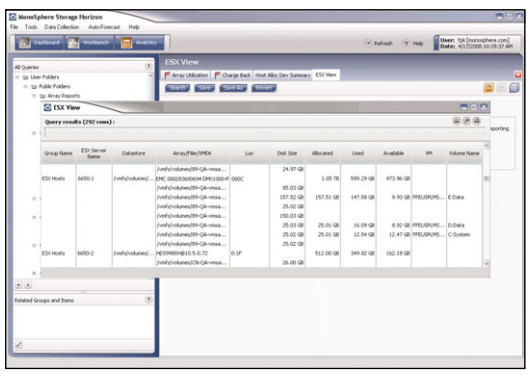

MonoSphere Storage Horizon 3.7 offers detailed views for more efficient storage management.

WITH THE VARIETY of different storage environments used by SMEs, it can be difficult and time-consuming to manage all of a company's data storage. MonoSphere has upgraded its storage management software to meet this need.

One of the newest upgrades to Storage Horizon 3.7 is increased support for VMware server virtualization with visualization of storage abstraction. The software analyzes and displays results for storage usage details and relationships between servers, file systems, virtual disks, guest OSes, and guest OS file systems/raw devices, so managers can determine when additional storage needs arise.

Other enhancements include automated chargeback analysis, advanced analytical capabilities, and analysis of database storage consumption. With automated chargeback analysis, logical and physical IT assets can be grouped with a variety of different parameters and automatically analyzed to show storage usage.

Advanced analytical capabilities provide reports to help eliminate wasted or unused storage assets. Reports analyze storage consumption by volume group, free pool report, LUN-to-disk analysis, and dark storage breakdown. Other new analytical functions include automated scheduling and distribution of analytical reports.

Enhanced database storage consumption analysis provides feedback that enables database users to drill down to see details concerning table spaces and data files, as well as view log applications, data vs. log information, and public folder and mailbox rollups. Storage Horizon 3.7 supports Oracle, MS SQL, and Sybase databases and MS Exchange.

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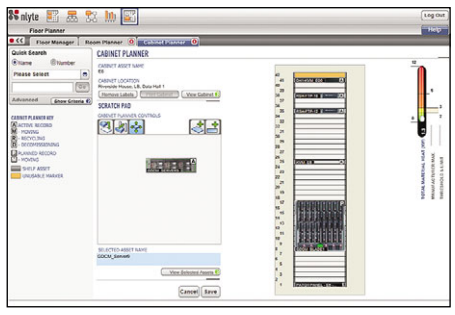

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IT PERSONNEL are facing enormous problems managing a dynamic data center environment. Impacts of implementations, consolidations, virtualization, the retirement of IT assets, and even basic IT changes lead to the risk of overheating, increased power costs, new capital equipment expense, cable infrastructure road blocks, system downtime, and security risks that result in increased operational cost.

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Global DataCenter Management provides enterprise software products to support strategic planning and operation of some of the largest data centers in the world. The company, founded in 2003 and headquartered in California and London, England, is uniquely positioned to provide automation and analytic expertise, focusing on the physical infrastructure needs of medium to extremely large data center environments.

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NETWORKING & VPN — MAY 23, 2008

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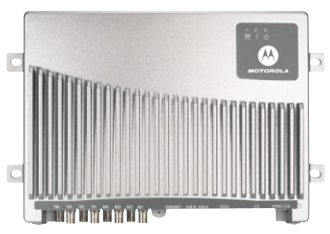

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